

# Purchasing Week

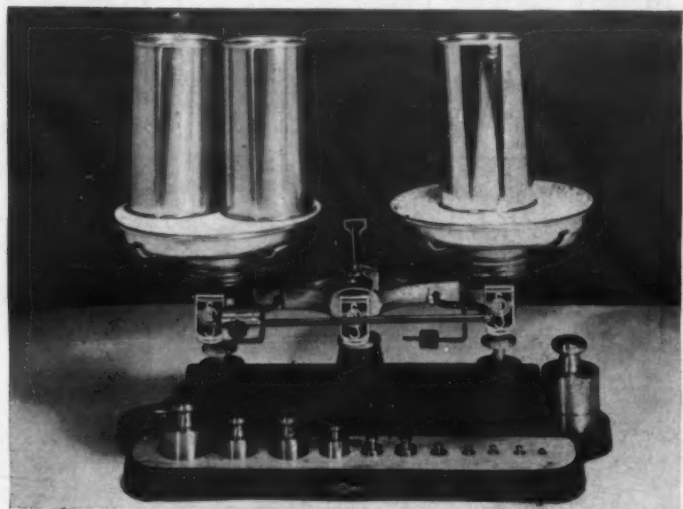
McGraw-Hill's National Newspaper of Purchasing

Vol. 3, No. 18

New York, N. Y., May 2, 1960

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\$6 A YEAR U.S. AND CANADA \$25 A YEAR FOREIGN



**TIN PLATE CANS:** Two cans (left) made from U. S. Steel's new tinplate weigh only as much as single can (right) made by regular process.

## Steel Fights Back in Can Market; Firms Testing New Skin-Thin Plate

**Pittsburgh**—Metal container buyers now have the first "solid" details on U. S. Steel Corp.'s development of a lighter, thinner tinplate.

The almost skin-thin product, aimed at fortifying steel against further inroads by competing container materials—particularly aluminum—is already being tested by several big can manufacturers. They are experimenting to determine where it can be used to best advantage.

U. S. Steel said last week it is seeking a patent on its method of making the tinplate, now produced in pilot plant operations in weights ranging from 40 lb. to 60 lb. per base box (217.78 sq. ft. of plate). Most tinplate now used by can producers is in the 75 lb. to 100 lb. base box weight range.

The new product is said to be half the thickness of the tinplate now used in can manufacturing. It is the result of large investments made at the company's research center here.

Robert B. Meneilly, general manager of tin mills products for the giant steelmaker, says the

(Turn to page 26, column 3)

## Industry Again Digs Deep to Get More Efficiency

**New York**—The current capital equipment buying surge is still gaining momentum. Top business leaders again have upped their plans for purchases of plant and machinery, and now see '60 outlays hitting a peak \$37.9-billion, 16% over last year.

That's the major finding of the thirteenth annual survey of Business' Plans for New Plants and Equipment, conducted by the McGraw-Hill Dept. of Economics.

The sharp 16% increase anticipated for this year is significantly above the 10% boost an-

(Turn to page 4, column 1)

## Shippers Gear for Benefits as First 'Guaranteed' Rail Rate Takes Effect

### Fewer Varieties Cut Costs, Standards Expert Tells P.A.'s

**Philadelphia**—Purchasing agents must concern themselves more with eliminating "items varieties" if they are to help their companies clamp the lid down on mounting indirect costs.

This change-in-emphasis on cost reduction problems will be one of the major points stressed during a two-day spring meeting of the American Standards Association, opening today at the Sheraton Hotel.

The entire opening session is devoted to "Motivations for Reducing Item Varieties," which will deal primarily with the factors necessary to simplify and improve inventory control and purchasing procedures.

During a pre-meeting interview, R. J. Abele, chief standards engineer for Burroughs Corp., Detroit, who will preside over the session, told PURCHASING WEEK:

"Cost reduction methods have all been directed toward cutting direct costs. Time and motion studies, and material and quality control programs have been slashing direct costs for years,

(Turn to page 27, column 1)

### Buyers Eye Disposable Tools at Detroit Show

**Detroit**—Throwaway tooling was the featured star of the American Society of Tool and Manufacturing Engineers' 1960 show here last week. Over 41,000 people flocked to the artillery armory to see the latest in disposable insert tooling and metal working equipment.

Pricing policies also came in for their share of attention. The recent 12% boost in twist drill and end mill lines of major manufacturers has raised some questions about future price trends. But most observers think the increase will spread to other cutting tools—and many doubt that the current boost will stick.

The consensus among exhibitors, PURCHASING WEEK learned,

(Turn to page 26, column 1)



**DRILL DEMONSTRATION:** P.A. Glen Dilling (left) of General Metal Products Co. watches Deka-Drill in action at American Society of Tool and Mfg. Engineers' Show held in Detroit.

### Soo Line Installs First Guaranteed Tariffs; ICC Boosts Forwarders

**Washington**—A series of rapid-fire developments in transportation rates last week is almost certain to spark new and numerous benefits for the nation's shippers—as well as arouse bitter opposition among truck and water carriers.

These developments include:

• The first "guaranteed rate" in the nation's history was put into effect by the Soo Line Railroad, Minneapolis, Minn., on Apr. 24 without further ICC intervention. It applies to oil field piping moving from Sault Ste. Marie, Ont., to Chicago.

• A second guaranteed rail rate applying to rugs and carpeting moving from Amsterdam, N. Y., to Chicago was slated to be put into effect by the New York Central Railroad on Apr. 30. As of late Thursday, no move was made by the ICC or truckers to block it.

• The ICC opened the way for freight forwarders to engage in volume shipments via Plan III piggyback (shipper-owned trailers on rail-owned flatcars) by upholding its previous decision on forwarder volume piggyback rates.

A great deal of confusion still surrounds the manner in which the Soo Line rate, also known as an agreed charge or contract rate,

(Turn to page 25, column 3)

### Economist Urges Get the Best Deal Here or Abroad

**St. Louis**—Should purchasing executives consider the effects on the entire U.S. economy when deciding whether to buy abroad?

One basic—though highly controversial—answer to this question was offered by a prominent St. Louis University professor last week during the Eighth Annual Purchasing Management Conference here on "Why Buy Foreign?"

Joseph P. McKenna, associate professor and director of the University's Department of Economics, told P.A.'s gathered at the conference: "Your job is not making foreign or public policy, but how to get the best deal for your company regardless of the marketplace."

He expressed "surprise" that purchasing agents should even

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### This Week's

## Purchasing Perspective

MAY 2-8

**FEWER PAPER SHUFFLERS**—If your firm is contemplating a major switchover from old paper shuffling and data collection techniques, here are some of the results you can expect:

• Introduction of electronic computers probably will effect a 25% reduction in the office work force (clerical and accounting jobs).

• Inventory facts and figures will accumulate at an amazing pace. Major companies who installed electronic computer setups report they never had so much data about basic production materials and other stock items.

This report on the impact of office automation comes from the Labor Department, which has just completed a major study among 20 large companies covering manufacturing, insurance, public utilities, and petroleum firms.

• • •

The federal study covered about 2,800 office workers in firms that adopted advanced office automated procedures utilizing computers. And although 25% of those jobs were eliminated, only nine of the 2,800 persons affected were actually laid off.

• About one-half continued to do the same kind of job. Another one-sixth quit, retired, took leaves of absence, or died. Many of these never were replaced.

• Some complications developed in the shifting of personnel to other jobs—especially for older workers and those in supervisory capacities. In many instances it proved difficult to find

(Turn to page 25, column 1)

## P/W PANORAMA

• **Capital Equipment Buying** is surging upward again, according to a new McGraw-Hill survey. And the ramifications for purchasing agents are manifold. The story on page 1 gives the details, and the center-spread on pages 14 and 15 charts them. See also page 2 for a between-the-lines run-down in the Price Perspective column.

• **U. S. Business** apparently has entered a rare phase—stability. Careful analysis of the current signs, as detailed by the story on pages 8 and 9, indicates we've settled on a high plateau of industrial activity that should hold up for at least the rest of 1960.

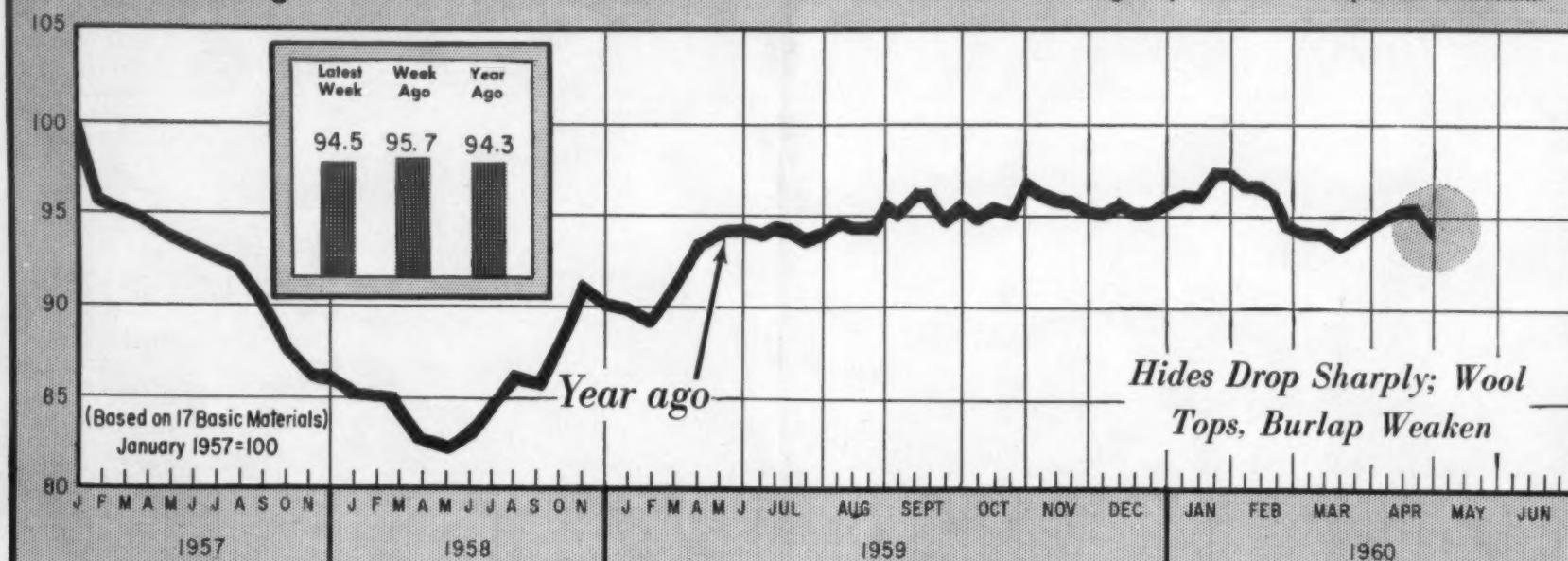
• **If You're Looking for Government Contract Work** from military or prime contractors, you'll be interested in how the Small Business Administration recommends you go about it. The story on page 18 outlines the steps SBA urges you to take.

• **P.A. Allan R. Dawson** made his first attempt at packaging design work when Federal Pacific Electric Co. decided to change its corporate image. The result: He won an award—and helped his firm. Dawson credits purchasing know-how in the story on page 24.



## Purchasing Week Industrial Materials Price Barometer

This index, based on 17 basic materials, was especially designed by the McGraw-Hill Department of Economics.



## This Week's Commodity Prices

	Apr. 27	Apr. 20	Year Ago	% Yrly Change
<b>METALS</b>				
Pig iron, Bessemer, Pitts., gross ton.....	67.00	67.00	67.00	0
Pig iron, basic, valley, gross ton.....	66.00	66.00	66.00	0
Steel, billets, Pitts., net ton.....	80.00	80.00	80.00	0
Steel, structural shapes, Pitts., cwt.....	5.50	5.50	5.50	0
Steel, structural shapes, Los Angeles, cwt.....	6.20	6.20	6.20	0
Steel, bars, del., Phila., cwt.....	5.975	5.975	5.975	0
Steel, bars, Pitts., cwt.....	5.675	5.675	5.675	0
Steel, plates, Chicago, cwt.....	5.30	5.30	5.30	0
Steel scrap, #1 heavy, del. Pitts., gross ton.....	35.00	35.00	37.00	-5.4
Steel scrap, #1 heavy, del. Cleve., gross ton.....	33.00	33.00	34.00	-2.9
Steel scrap, #1 heavy, del. Chicago, gross ton.....	32.00	32.00	32.00	0
Aluminum, pig, lb.....	.26	.26	.247	+5.3
Secondary aluminum, #380 lb.....	.25	.25	.218	+14.7
Copper, electrolytic, wire bars, refinery, lb.....	.326	.326	.313	+4.2
Copper scrap, #2, smelters price, lb.....	.245	.245	.26	-5.8
Lead, common, N.Y., lb.....	.12	.12	.115	+4.3
Nickel, electrolytic, producers, lb.....	.74	.74	.74	0
Nickel, electrolytic, dealers, lb.....	.74	.74	.74	0
Tin, Straits, N.Y., lb.....	.992	.989	1.029	-3.6
Zinc, Prime West, East St. Louis, lb.....	.13	.13	.11	+18.2
<b>FUELS†</b>				
Fuel oil #6 or Bunker C, Gulf, bbl.....	2.10	2.10	2.00	+5.0
Fuel oil #6 or Bunker C, N.Y., barge, bbl.....	2.47	2.47	2.37	+4.2
Heavy fuel, PS 400, Los Angeles, rack, bbl.....	2.15	2.15	2.15	0
Lp-Gas, Propane, Okla., tank cars, gal.....	.035	.04	.045	-22.2
Gasoline, 91 oct. reg., Chicago, tank car, gal.....	.115	.115	.12	-4.2
Gasoline, 84 oct. reg., Los Angeles, rack, gal.....	.108	.108	.117	-7.7
Kerosene, Gulf, Cargoes, gal.....	.09	.09	.091	-1.1
Heating oil #2, Chicago, bulk, gal.....	.088	.088	.13	-32.3
<b>CHEMICALS</b>				
Ammonia, anhydrous, refrigeration, tanks, ton.....	90.50	90.50	90.50	0
Benzene, petroleum, tanks, Houston, gal.....	.34	.34	.31	+9.7
Caustic soda, 76% solid, drums, carlots, cwt.....	4.80	4.80	4.80	0
Coconut oil, inedible, crude, tanks, N.Y. lb.....	.165	.175	.21	-21.4
Glycerine, synthetic, tanks, lb.....	.293	.293	.278	+5.4
Linseed oil, raw, in drums, carlots, lb.....	.166	.166	.16	+3.8
Phthalic anhydride, tanks, lb.....	.165	.165	.165	0
Polyethylene resin, high pressure molding, carlots, lb.....	.325	.325	.35	-7.1
Rosin, W.G. grade, carlots, fob N.Y. cwt.....	14.00	14.00	9.85	+42.1
Shellac, T.N., N.Y. lb.....	.31	.31	.30	+3.3
Soda ash, 58%, light, carlots, cwt.....	1.55	1.55	1.55	0
Sulfur, crude, bulk, long ton.....	23.50	23.50	23.50	0
Sulfuric acid 66% commercial, tanks, ton.....	22.35	22.35	22.35	0
Tallow, inedible, fancy, tank cars, N.Y. lb.....	.063	.063	.074	-14.9
Titanium dioxide, anatase, reg. carlots, lb.....	.255	.255	.255	0
<b>PAPER</b>				
Book paper, A grade, Eng. finish, Untrimmed, carlots, cwt.....	17.75	17.75	17.00	+4.4
Bond paper, #1 sulfite, water marked 20 lb, car. lots, cwt.....	25.20	25.20	24.20	+4.1
Chipboard, del. N.Y., carlots, ton.....	100.00	100.00	95.00	+5.3
Wrapping paper, std. Kraft, basis wt. 50 lb rolls.....	9.25	9.25	9.00	+2.3
Gummed sealing tape, #2, 60 lb basis, 600 ft. bundle.....	6.30	6.30	6.40	-1.6
Old corrugated boxes, dealers, Chicago, ton.....	20.00	20.00	21.00	-4.8
<b>BUILDING MATERIALS‡</b>				
Cement, Portland, bulk carlots, fob New Orleans, bbl.....	3.65	3.65	3.65	0
Cement, Portland, bulk carlots, fob N.Y., bbl.....	4.18	4.18	4.25	-1.6
Southern pine, 2x4, s4s, trucklots, fob N.Y., mftbm.....	124.00	124.00	126.00	-1.6
Douglas fir, 2x4, s4s, carlots, fob Chicago, mftbm.....	139.00	139.00	141.00	-1.4
Douglas fir, 2x4, s4s, carlots, fob Toronto, mftbm.....	105.00	105.00	120.00	-12.5
<b>TEXTILES</b>				
Burlap, 10 oz. 40", N.Y., yd.....	.117	.118	.10	+17.0
Cotton middling, 1", N.Y., lb.....	.341	.341	.361	-5.5
Printcloth, 39", 80x80, N.Y., spot, yd.....	.205	.205	.187	+9.6
Rayon twill, 40½", 92x62, N.Y., yd.....	.235	.235	.22	+6.8
Wool tops, N.Y., lb.....	1.46	1.47	1.58	-7.6
<b>HIDES AND RUBBER</b>				
Hides, cow, light native, packers, Chicago, lb.....	.195	.225	.295	-33.9
Rubber, #1 std ribbed smoked sheets, N.Y., lb.....	.405	.401	.348	+16.4

† Source: Petroleum Week ‡ Source: Engineering News-Record

This Week's

## Price Perspective

MAY 2-8

READ BETWEEN THE LINES, and you can find a lot of optimistic purchasing news in McGraw-Hill's latest capital spending survey.

• **Productivity**—The rising trend toward modernization (\$2 out of every \$3 will go for this purpose) indicates suppliers are striving hard to reduce labor costs via increased production efficiency.

• **Price**—The survey results reveal a triple-barreled anti-inflationary effect in the making. First, rising productivity will relieve cost pressure. Secondly, increased capacity (4% a year in 1961-63) means that supplies will remain plentiful, that competition will remain keen.

Finally, there's new product development. The expected influx of new products will intensify inter-industry competition, make a lot of suppliers think twice before posting increases.

• **General business**—The sharp 16% outlay boost expected for this year (26% in the manufacturing area) can't be underestimated. It's bound to give the entire economy (not just equipment industries) a shot in the arm.

**PROJECTED CAPACITY BOOSTS**, at first glance, might be questioned.

For they seem to conflict with the survey's finding that manufacturers are now operating at only about 85% of capacity—9% below the preferred rate of 94%.

Why increase capacity under these conditions? Part of the answer, of course, lies in expected sales increases.

But an even bigger part lies in the need to increase efficiency. Modernization is a "must" in today's competitive, high-labor-cost markets.

And any firm that installs new, more efficient, equipment almost always increases capacity at the same time. For much of the savings from modernization derive from the fact that new machines can turn out more units per hour than the old ones.

This automatically results in an increase in capacity.

**ONE BIG QUESTION:** How will demand stack up against anticipated capacity increases—now estimated at 4% annually over the next few years?

Putting this another way—will sales and production rises match this greater capacity to produce?

Based on past experience, a pretty close match is indicated. A chart on postwar production trends, for example, shows an average 3¼% rate of growth in the 1947-1960 period (see chart, page 9).

It indicates little change in the production-capacity relationship—thus manufacturers should continue to operate close to current rates (85% of capacity). It means—short of war or other catastrophes—the current ample supply outlook should continue into 1961 and 1962.

**AS FOR THE GENERAL ECONOMIC EFFECT**, the new peak capital outlays can't help but keep business on an even keel.

Again, postwar history supplies the proof. The table below shows changes in capital spending and general business conditions.

Capital Spending (Yr.-Yr. Change)	Business Conditions (Yr.-Yr. Change)
1954 - 5%	- 7%
1955 + 7%	+13%
1956 +22%	+ 3%
1957 + 5%	+ 1%
1958 -17%	- 7%
1959 + 7%	+13%

Note the correlation. A rise or fall in capital spending always brings about a similar change in business. The current 16% spending boost (for 1960) should be enough to keep business in the "plus" column again.



## Cement Producers Reject Price Cut Despite Slow Starts and Competition

**Philadelphia**—"We need the business, but we're not going to cut prices to get it!"

That's how a leading Eastern producer summed up the current price outlook for cement last week as the building season got into full swing.

Other industry leaders agreed cement prices would remain firm throughout 1960 and that rumors of an impending price drop were "unfounded." These reports had been based on:

- Slow building starts during the first quarter due to bad weather.

- Increased foreign competition which last year glutted the New England market with more than 2-million barrels of cement from abroad.

- Reduced earnings reports by Lehigh Portland Cement Co., leading Philadelphia producer, and other big firms.

Despite reduced earnings, a Lehigh official stated, "We are now anticipating a year that will equal 1959 production." He said the company's disappointment lay in the fact that sales have not measured up to first-of-the-year "boom predictions."

A leading New England cement company agreed: "We had been anticipating a 25% gain over last year. Now, however, we'll be

lucky to meet last year's production. It looks like we'll fall some 1% to 2% behind 1959 production figures."

He denied, however, that the industry would try to improve business by chopping prices. "If anything, we need a price increase. Foreign competition, however, has made this out of the question." Portland cement prices are currently being quoted at \$3.65/barrel on bulk carlots for New Orleans and \$4.18, for New York.

## Prices of Brass Sheet Maintain Steady Level

**New York**—Brass sheet prices have been holding steady at levels which have resisted the cost-cutting pressures that hit certain copper sheet products two weeks ago. As of mid-way through last week brass tags remained in the 50.57¢/lb. (yellow) to 57.23¢ (gilding metal) range.

A PURCHASING WEEK story (p. 1, Apr. 28) carried a headline which indicated the recent copper sheet cuts applied to brass as well. No such implication was intended in the story which also carried comment by copper industry sources on the possibility

of future price reductions in basic copper.

W. J. Weir, sales manager of the Rolling Mill Div. of The Miller Co., Meriden, Conn., commenting on the story in a letter to PURCHASING WEEK, stated that "purchasing agents, reading only the headline, are already asking a number of brass sheet and strip producers about the new prices which do not exist."

"In no place in the article," wrote Mr. Weir, "is there any mention of changes in price on brass sheet . . . There is mention of a 7¢ price cut for roofing

copper sheet items which has no bearing whatever on brass sheet and was confined to that special commodity on copper sheet."

### Lumber Exchange

**New York**—A proposal to establish a commodity exchange in lumber has stirred up growing interest throughout the industry. If such an exchange should work out, it would provide a means for P.A.'s to hedge against inventory loss in this price-volatile material.

## Pennsylvania Initiates Fight Against Increase In Wholesale Gas Rates

**Harrisburg, Pa.**—Pennsylvania's Public Utility Commission has announced an unprecedented move to "keep natural gas rates down" by fighting proposed wholesale rate boosts before the Federal Tax Power Commission.

The state regulatory agency disclosed two steps it is taking to oppose a recent \$26-million increase by the Tennessee Gas Transmission Co.:

- (1) It will hire a top Washington consulting engineering firm for "full and active participation before the FPC in the Tennessee case."

- (2) It has invited Pennsylvania gas companies, representatives of cities affected, and other interested parties to a May 5 conference in Harrisburg "to draft cooperative plans on procedure and ways to meet necessary legal and technical assistance costs."

Increasing wholesale cost of gas has forced Pennsylvania companies to hike their rates, and the spiral is continuing, the PUC said.

The state agency wants to look into the producer cost paid by Tennessee at Houston, Texas, among other factors in pipe line operations.

### L.A. Sets Week for P.A.

**Los Angeles** — Los Angeles County has designated the week of May 22 to 28 "Purchasing Agents' Week" in honor of the National Association of Purchasing Agents annual convention.

The designation came as a result of a resolution to the County Board of Supervisors by Burton W. Chace, chairman of the Purchasing and Stores Committee.

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# Capital Spending Gains Momentum; New Surge Slated to Carry Outlay to Record \$37.9-Billion

(Continued from page 1)  
 anticipated by these same businessmen as late as last fall.

It indicates that—despite current leveling off in production—businessmen are growing more, not less, optimistic about the future.

The new estimate is also above the 14% increase predicted by the Commerce Department only last month.

Here are some of the other highlights of the McGraw-Hill survey:

• **Who's buying**—Biggest gain over 1959 (26%) is centered in manufacturing—with metal and machinery firms among the industry leaders. But every industry sees gains for the year.

• **1961-63 outlook**—The average level of spending already planned for 1961-1963 is higher than the amount spent in 1959. These are preliminary plans—and incomplete in many cases. Experience shows that businessmen generally underestimate their capital expenditures for periods longer than one year ahead.

• **Sales anticipations**—Manufacturing companies expect sales to increase 8% this year and an additional 17% during the 3-year period 1961-1963.

• **Productivity**—All signs point to a continuing rise in production efficiency. For example, close to \$10-billion or about two-thirds of this year's expenditures planned by manufacturing firms is for modernization. Only one third will go for expansion.

• **Current capacity**—Manufacturing companies were operating at an average rate of 85% of capacity at the end of 1959. This is 9% below the rate (94%) they say they would prefer to operate at.

• **Future capacity**—In spite of the current overcapacity, manufacturing firms are planning a modest 5% increase in capacity this year—and they plan to increase capacity at a rate of about 4% per year in the next 3 years. Reasons: Expected higher sales and the need for modernization.

• **Research**—Research and development spending is expected to reach \$9.5-billion this year and \$10.7-billion by 1963—6% and 12% respectively above '59 levels.

• **New products**—The continuing emphasis on research and development will result, of course, in a rash of new products.

Thus, by 1963 manufacturers expect 12% of their sales to be in new products—products not made in 1959.

• **Depreciation**—Depreciation allowances will rise to nearly \$25-billion by 1963—up 18% over '59. The rise will provide a strong prop for a high level of capital investment.

For those interested in gaging the improvement, the McGraw-Hill survey has been made directly comparable to government figures. In the past capital expenditures were not comparable with the official government figures because of differences in industry classifications. Here's such a year-to-year comparison for key industries:

## MANUFACTURING PLANS

Among the manufacturing industries, the auto group shows the biggest gain in 1960 with spending plans up 66%. But the other industries in metalworking—machinery, electrical machinery, transportation equipment—also show substantial gains this year.

The steel industry is planning to spend \$1.6-billion this year and more than \$1.5-billion in 1961—very near the record amount spent in 1957. Nonferrous manufacturers indicate spending plans of \$369-million this year—and approximately the same level over the next 3 years.

The chemical process industries, as a group, indicate considerably more long-range stability in their plans than the metalworking or primary metals groups. The chemical industry, which has spent over a billion

**WHAT IT MEANS**  
**PURCHASING WEEK'S**  
 chart story on pages 14-15 interprets the survey—in terms of what it means to purchasing. Here, in simple graphic terms, is what the next year or so holds in store for—machinery buying, productivity, prices, supplies, new products.

dollars every year in the postwar period, already has plans to spend an average of \$1.7-billion in each of the next 4 years.

For details on other industries, see table on page 14.

## NON-MANUFACTURING

Every industry in the non-manufacturing area has increased its spending plans for 1960 since

last fall. Electric and gas utilities now plan to spend a record \$6.2-billion this year—only a few million dollars less than their 1957 peak. To meet growing power needs, electric utilities' planned expenditures remain high throughout 1961-1963.

A sharp rise in expected deliveries of jet airliners in 1960 will show up in the spending of "other transportation" this year. And, since most of the aircraft deliveries will be completed this year, there will be a substantial decline in each of the succeeding years.

The mining companies, which account for a relatively small part of the non-manufacturing total, show an up-and-down pattern in plans beyond this year.

Railroads indicate a 16% increase in expenditures 1960. Although there will be some fluctuation in expenditures beyond this year, this survey indicates plans of close to a billion dollars in spending in all the years reported.

## GOAL IS MODERNIZATION

Manufacturing companies are concentrating on replacement and modernization in an effort to increase productivity and reduce costs. This year, industry plans to devote 65% of its total spending for replacement and modernization and only 35% for expansion.

These are almost the same proportions devoted to this purpose as in 1959. However, total spending by manufacturers in 1959 was only \$11-billion compared with \$15.2-billion this year.

Thus, nearly \$4-million more will be spent for modernization this year. Only the chemical industry expects to spend a larger proportion of its investment on expansion than on modernization of its facilities.

## CAPACITY WILL RISE

With the emphasis on modernization, manufacturers are planning to increase capacity by only 5% this year. With the exception of 1958, this is the smallest planned increase in the past 10 years.

Manufacturing companies plan to add to capacity at a rate of about 4% per year over the next three years. These smaller additions to capacity are a reflection of operating rates that are below the preferred rates.

At the end of 1959 manufacturers, on the average, were operating at 85% of capacity. This is 9% below the rate they indicated they preferred to operate.

Manufacturing companies now would prefer to operate at 94% of capacity, compared with 90% as revealed in the McGraw-Hill survey of April 1957, the last time this question was asked. With the exception of the paper industry, every industry now indicates a higher preferred rate.

## RESEARCH AND NEW PRODUCTS

Industry is increasing its research programs in an effort to increase productivity, cut costs, and develop new products and processes. Every industry—with the exception of the aircraft industry, which obtains a large proportion of its funds for research from the federal government—

# This Week's Washington Perspective

MAY 2-8

The Administration's big drive to expand exports is accompanied by much ballyhoo, little tangible results.

The campaign fails to excite U. S. companies noticeably. The Commerce Dept. contends more firms have shown interest in exports since the campaign began. But it is conceded there is still a long way to go.

Critics charge the Administration leans heavily on exhorting business to export but provides few incentives.

Major feature of the Administration program is to provide short-term insurance to businesses against political risks, such as losses due to a change in government or from monetary devaluations.

Some exporters complain this has only minor value, for exports to unstable and underdeveloped countries. They say it does little to open markets in the big European countries and others with advanced economies.

The Commerce Dept. plans to step up its publicity campaign in the months ahead. But Democrats and many Republicans are openly dubious about its success.

Big drive centers in Congress to expand the Administration program. The aim: to extend insurance to business against all commercial losses, such as non-payment of debt by a foreign receiver.

Vice Pres. Nixon's hand is seen behind some of these moves. A principal exponent of expanded insurance is Californian Henry Kearns, former Undersecy. of Commerce for foreign trade and now active in Nixon's Presidential campaign.

Kearns told Congress last week that the Administration program will not do the job. He appealed for broader insurance similar to that provided by European countries for their businessmen.

Chairman Warren Magnuson (D-Wash.) of the Senate Commerce Committee also lines up in favor of such insurance.

Additional recommendations: Chemical producers and other firms call for more aggressive action by the Administration to try to beat down tariff walls in other nations.

A "Buy American Act" type of regulation is advanced to help smaller manufacturers selling to government.

The Small Business Administration has set up a tentative regulation to govern federal set-asides and other contract awards to small companies.

The ruling states that companies will be barred from preferential treatment under the Small Business Act if the products they sell to government consist of more than 50% of foreign-made materials.

Interested firms have 30 days to furnish comments to SBA on the rulings before they go into effect.

Labor Secy. Mitchell tries to line up railroad unions behind the Administration's proposal to eliminate subsidies to other forms of transportation.

One indirect result of such a proposal would be to drive a wedge into Teamster boss James Hoffa's dream of a grand alliance of rail, truck, airline, and shipping unions under one organization. The non-rail transport unions would be certain to resist any such innovation.

Mitchell appealed to rail labor-management to press for a "fundamental overhauling" of the Interstate Commerce Commission to allow for greater freedom of rate-making.

Mitchell also urged that all transport subsidies be abolished and user taxes be instituted. This has long been an Administration recommendation, but Congress has snubbed the idea repeatedly, and is certain to do so again this year.

expects to spend more for research and development this year.

A significant share of manufacturers' research and development programs is for new products. Manufacturing companies estimate that 12% of their 1963 sales will be accounted for by new products. (New products are defined as "products not made in 1959 or products sufficiently changed to be reasonably considered as new products".)

And close to one-third of the reporting companies indicated that a significant share of their 1960 expenditures for new plants and equipment will be for facilities to make new products.

The largest increase in new products is expected by the transportation equipment industry, largely aircraft. With the exception of the auto industry, the metalworking industries expect new products will account for at least 15% of 1963 sales.

The chemical industry expects 14% of its 1963 sales to be in new products and other figures range from 4% in the petroleum industry to 25% in the machinery industry.

This will mean the introduction not only of many new products, but of completely new processes during the next 4 years to come.

## Weekly Production Records

	Latest Week	Week Ago	Year Ago
Steel ingot, thous tons	2,261	2,238*	2,627
Autos, units	145,220	135,402*	133,987
Trucks, units	25,733	25,681*	26,987
Crude runs, thous bbl, daily aver	7,967	7,898	7,705
Distillate fuel oil, thous bbl	12,678	12,249	11,543
Residual fuel oil, thous bbl	6,164	6,761	6,401
Gasoline, thous bbl	28,246	28,472	27,389
Petroleum refineries operating rate, %	81.6	80.9	79.7
Container board, tons	151,890	167,502	152,870
Boxboard, tons	88,578	103,323	99,057
Paper operating rate, %	97.0	96.6*	95.8
Lumber, thous of board ft	258,425	260,035	255,666
Bituminous coal, daily aver thous tons	1,463	1,385*	1,337
Electric power, million kilowatt hours	13,213	13,263	12,538
Eng const awards, mil \$ Eng News-Rec	493.1	758.3	411.0

\*Revised



## Newly Incorporated City Is Buying Headache

**Richland, Wash.**—Stepping into a job as top P.A. for an established city is tough enough. But taking over the purchasing department of a newly incorporated city of 22,000—that's a king-sized headache.

However, Carl W. Kreugel, purchasing agent for the City of Richland, did it.

### Became Independent in 1959

Richland, headquarters of the Atomic Energy Commission's Hanford Works, became an independent, incorporated city early in 1959, and Kreugel took over the job of supervising the development of the town's centralized purchasing department last June.

The city had been administered by the AFC through its community contractor, General Electric Co., which also is contractor for the Hanford Works. Gradually, however, the various municipal and utility operations,

such as water, sewers, electricity, police, and fire departments, were turned over to the new city government.

Kreugel, former community clerk in GE's community division, had to adjust and expand his department's activities to meet the needs of the new departments as they were added to the city government.

Richland is now working on its first complete annual budget, which will include funds for all the various utility functions. The city is planning a total 1960 ex-

pense of \$3.8-million, including \$1.4-million for the electrical operation.

Another problem Kreugel had to face as Richland's first P.A. was transportation routes from suppliers. When the city was under federal control, the AEC only leased property to necessary retail and service businesses.

Now there is a dearth of industrial equipment suppliers, the nearest of which is eight miles away. "We must go outside of the city for most of the things we buy," Kreugel said.



**CITY P.A.** Carl W. Kreugel faced some major headaches when he took over buying job for a newly incorporated city; population: 22,000.

## Barred Firms May Appeal in N. Y.

**Albany**—Any firm disqualified from doing business with a city or community in New York state because a member refused to testify or waive immunity before a grand jury, now can appeal the ruling under a bill signed by Governor Rockefeller.

The legislation amends the disqualification law passed in 1959, which grew out of the Erie County grand jury investigation into street-paving contracts and alleged payoffs to city officials.

The former law disqualified firms whose members were balky witnesses from entering into contracts with the city for a period of five years.

Under the amendment, disqualified firms now have the right to appeal for an order "discontinuing the disqualification."



**PW WINS AWARD:** Associate Editor Robert S. Reichard's post-strike analysis, "Steel Hangover: Who's Aching and How Long," received a merit award in the annual Jesse H. Neal editorial competition sponsored by Associated Business Publications. Appearing in the Nov. 30, 1959, issue of *Purchasing Week*, the article detailed the effects of the 116-day steel strike and assessed, industry by industry, the probable course of production come-back. *Purchasing Week's* Price and Trends Editor based his award-winning report on returns from a questionnaire sent to more than 1,000 steel-buying purchasing executives.

## WELDED STAINLESS TUBING SELLS THIS BOAT RAIL PACKAGE



What's new in welded stainless tubing design? For one—this eye-catching package for pleasure boats.

Out of 1-inch stainless tubing and imagination, gleaming bow rails are now available in pre-cut, preformed package units ready for quick assembly on the decks they'll beautify.

Because welded stainless tubing is practical in price, uniform in dimension and furnished in a range of compositions and tempers, it is a designer's joy to work with. Remember this modern, strong, ever-bright and easy to clean material in your next project—and specify that it be supplied by a quality producer of welded steel tubing! • Meanwhile, write for detailed Bulletin 8591.

LC-804



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## Industry News in Brief

### Harvey Aluminum Expands

**Torrance, Calif.**—Harvey Aluminum Inc. is enlarging its aluminum reduction capacity 25% with the addition of new facilities at its plant at The Dalles, Ore.

New fabricating facilities consisting of billet casting, wire rod and related production equipment also will be built at The Dalles site. A merchant bar mill and conduit facilities will be constructed at Torrance.

### New Ceramics Plant

**Chattanooga**—American Lava Corp. will build a technical ceramics plant at Laurens, S. C. Production at the plant is expected to begin early next year.

The company, a wholly owned subsidiary of Minnesota Mining and Manufacturing Co., St. Paul, produces electrical insulators, capacitors and components for the electronics industry.

### New Plant Underway

**Russellville, Ky.**—Emerson Electric Manufacturing Co. of St. Louis is constructing a \$2-million plant here for the manufacture of electric motors, electrical equipment, and electronic components.

### Can Plant Opening

**Dallas**—A new can making plant will be added to the Great Southwest Industrial District here. R. C. Can Co. will open a new fiber can plant in Arlington next month. Fully equipped, the plant represents a \$750,000 investment.

### On Stream

**Midland, Mich.**—Kaiser Refractories & Chemicals' new \$3-million periclase plant is now on stream. The plant has a capacity to produce 45,000 tons of periclase and refractory grade magnesias annually. It uses magnesium hydroxide furnished by Dow Chemical Co. Periclase is used in the manufacture of refractory brick and mixes.

### Stauffer Chemical Depot

**Elrama, Pa.**—Construction has started of a carbon bisulphide storage and distribution depot here by Stauffer Chemical Co. Scheduled for completion in June, the project will include 22 tanks.

The chemical will be shipped by barge from Stauffer's plant in Le Moyne, Ala. to Elrama. The company will service Elrama with two 1,000-ton capacity barges.

### Paper Firm Modernizes

**Hoquiam, Wash.**—Grays Harbor Paper Co. will produce 250 tons of fine paper daily when expansion of present facilities is completed next year. The firm is owned by Rayonier, Inc., and Hammermill Co. Expansion includes the installation of a new 180-in. Beloit fine paper machine and modernization of existing plant facilities.

### Litton Industries Buys

**Beverly Hills, Calif.**—Litton Industries has acquired Servomechanism (Canada) Ltd. in a cash deal. The firm, formerly a subsidiary of Servomechanisms, Inc. of Los Angeles, is engaged in development and production of electronic equipment.

### Steel Processing

**Detroit**—The Steel Service Center of The R. C. Mahon Co. is processing steel on new equipment which it claims is an improvement over former methods using torch burning or slot punching. Heart of the new operation is a rotary beam splitter which will provide a complete range of T-shaped structural steel sections.

### Name Changed

**Pittsburgh**—Pittsburgh Sanitary Chemical Co. is the new

name of the Pittsburgh Chemical Co. The firm makes and markets chemically based liquids used to clean and disinfect plumbing fixtures.

### GE Plans Space Center

**Philadelphia**—Construction has started on General Electric Co.'s \$14-million space technology center to be built in Upper Merion Township, near the Pennsylvania Turnpike and Schuylkill Expressway.

The center, to be known as the Valley Forge Space Technology

Center, will be located about 17 miles west of here. GE's Missile & Space Vehicle Department, now in Philadelphia, will occupy the 130-acre site.

### Output to Double

**Memphis**—Aluminum Foils, Inc. will more than double its output of high purity foil when its new plant at Jackson is completed next month.

The super purity aluminum produced by the company is sold under the trademark Raffinal. It is used in electrolytic capacitors, chemical processing in catalysts for high octane gasoline, and in metal refining.

### Acquires Plant

**Baltimore**—Ellicott Machine Corp. has acquired the plant of Charles T. Brandt, Inc. located at Bush and Ridgely, here. The metal working plant will be operated by Ellicott-Brandt, Inc., an Ellicott subsidiary.

### Merger Completed

**Jersey City**—Onyx Oil & Chemical Co. has merged with the Onyx Chemical Corp. and will be known under the latter name. Onyx Chemical Corp. produces quaternary ammonium germicides, and textile finishing compounds.



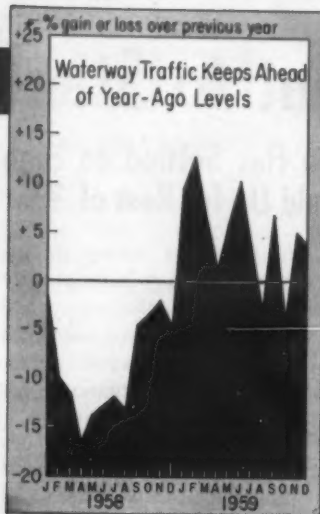
Bearing life increased at least two and one-half times with Gulfcrown Grease E.P. on Green River Steel soaking pit covers.

**Gains 36% more production, saves \$5,000 a week, by**  
**GULF MAKES THINGS**

"We've discovered what important savings can be made by simply changing from one grease to another," says Henry J. Werner, Maintenance Superintendent, Green River Steel Corporation, Owensboro, Kentucky. "We were having trouble with the bearings on our soaking pit covers. The grease kept melting out. This meant shutting down the pits, at a downtime cost of \$650 an hour. When they're down, we're not pressing steel."

Gulf engineers recommended Gulfcrown Grease E.P., a multi-purpose lithium base grease formulated for unusually heavy bearing loads and high temperatures. "Now," Mr. Werner says, "we have not changed a bearing in the ten weeks the new grease has been in use. We used to replace each bearing every four weeks. Downtime has been cut from 12 hours a week to 4, a weekly savings of \$5,000. This has resulted in an increase of our average





## P/W TRANSPORTATION MEMOS

**WEST COAST REVIVAL:** Coastal shipping service soon may be revived on the West Coast. Olympic-Griffiths Lines is now seriously studying plans to launch two container ships that could handle cargo in 20-ft. truck-trailer vans.

Each vessel would carry 75 vans and make round trips on a weekly basis from Seattle to San Francisco and Los Angeles, providing shippers in those areas with complete door-to-door fishyback service. The line also is considering the possibility of a third ship making calls at Portland.

**MORE FISHYBACK:** The Bull Lines, headquartered in New York, is now officially in the truck-trailer-on-boat business. It launched the second of its C-2 cargo ships last week on twice-weekly sailings between New York and Puerto Rico, carrying 22 demountable 35-ft. trailers.

To meet the new competition, Sea-Land Service, Inc., formerly Pan-Atlantic Steamship Corp., New York, has doubled its weekly trailership service to Puerto Rico. The faster schedule eliminates a northbound call at Jacksonville, Fla.

**FASTER EXPRESS BY AIR:** Shippers in areas with no scheduled airline service should take a look at a new cargo pact for coordinated airfreight-surface express services drawn up between United Air Lines and Railway Express Agency.

The new agreement provides for a single receipt to shippers covering movement by air freight between cities in United's system and surface express between these points and non-airport communities served by REA. The pact becomes effective June 1.

Shipments may be originated as air freight and delivered to final destinations as surface express, or in reverse order. Charges, either prepaid or collect, will be a combination of the applicable air and surface rates of the two carriers.

**NAME CHANGES MEAN SAVINGS:** A special freight committee of the Association of Electronic Distributors, Los Angeles, has proven again that there's more in a name than meets the eye—especially in transportation.

The committee has drawn up a rate chart to help members eliminate overcharges that result from material being shipped from various points under the wrong name category. **EXAMPLE:** If an "amplifier" is shipped out of New York City as an "amplifier," the charge is \$11.04 cwt. If shipped as a "talking machine part" the charge is only \$9.13 cwt, a saving of \$1.91 cwt.

**GO BY BUS:** Greyhound is launching an intensified promotional campaign to acquaint purchasing and traffic people with its package freight program. The bus line says it has always had the "right" and the space to handle package freight and has been doing it for some time "without blowing the bugles."

Now Greyhound is pushing for volume, and publicizing its same-day service (within 700 miles) plus the economies of shipping small (24x24x48 in. is top size, 70 lb. top weight) packages via bus.

**NEW PARCEL POST SIZES:** Postmaster General Summerfield has suggested establishment of the following maximum size and weight limits on parcel post effective July 1:

- For parcels moving between first class post offices—40 lb. and not to exceed 100 in. in length and girth combined with a maximum length of 34 in.

- For special mailings set forth in the present law—70 lb. and not to exceed 100 in. in length and girth combined.

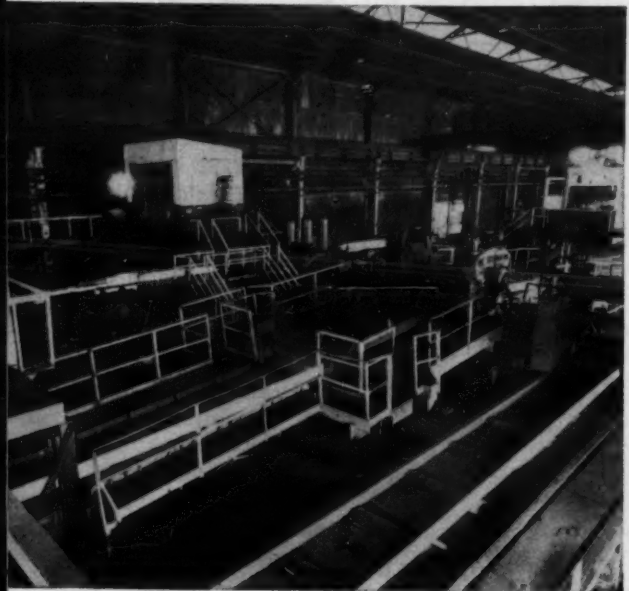
**WHISTLESTOPS:** Eastern railroads plan to increase minimum charges on less-than-carload shipments from \$3.06 to \$5.00 per shipment. Tariffs covering the increases are expected to be made on a national basis if other territory roads concur. . . . At the same time, the ICC has turned down an Eastern railroad petition to reconsider an original request for increases on all first class rates on shipments under 5,000 lb. by 29¢ cwt. regardless of distance. . . . The Chesapeake and Ohio R.R. reports encouraging response to its all-piggyback through train service between Buffalo and Chicago, initiated recently.



Gulf Harmony oil protects against rust and foam in hydraulic systems of Green River's forging presses.



Manipulator, lubricated with Gulfcrown Grease E.P., places billet in forging press.



Longer gear and bearing life on Green River's blooming mill, intermediate and finishing stands is assured by the use of Gulf E.P. lubricants.



Left to right, Marshall Ringo, Gulf Sales Representative, Thomas J. Bartlett, Jr., Gulf Owensboro Distributor, Nelson C. Walker, Executive Assistant to the President, Green River Steel Corp., and George Carney, Gulf District Manager.

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production of 36%, or 702 tons a week."

Based on this experience, Green River plans to standardize on Gulfcrown Grease E.P. for grease applications. To protect against rust and foam in hydraulic systems throughout the mill, Gulf Harmony® oil is used.

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# All Signs Point to Stable

## Analysis Indicates Nation Has Settled on High Plateau Which Should Hold Up for Rest of Year

What phase of the business cycle are we in?

All signs point to a period of stability—a rare phase in the U.S. business curve.

Most economists had been placing the peaking out point of the current cycle at any time from late second quarter of 1960 to early 1961.

But there are strong indications that we may have already passed the peak—that we reached it in January when industrial production, the traditional measure of cyclical fluctuations, hit 111 (1957 = 100, see charts).

And careful analysis indicates we've settled on a high plateau of industrial activity. There will be minor fluctuations, but we should stay up there for the rest of the year and perhaps even longer.

### LOCATING THE PEAK

The signs that point to our having passed the peak of the current cycle are:

- **Comparison with preceding cycles.** The chart at the left shows that the two previous cycles—July, 1953 to December, 1955, and October, 1948 to March 1951—each stretched 30 months from old high to new high.

Our current business cycle was 30 months old on January, 1960. Since then industrial production has slipped slightly in both February and March, and some further decline is expected for April.

- **Steel operating rate.** Steel production is the bellwether of total industrial production. The industry, which began the year operating at 96% of capacity, has dropped to 80%—and some experts estimate it will hit 70% in May before the decline is stopped.

The reason: Consumption of finished steel is running at 74% of the industry's ability to turn it out.

- **Inventories and order backlogs:** The inventory buildup, which had boosted steel consumption following the steel strike, is just about completed. Cessation of inventory buildup goes hand in hand with a drop-off in new orders—and reduced backlogs—not only for steel, but also for metalworking machinery, general-purpose industrial machinery, and other important industries.

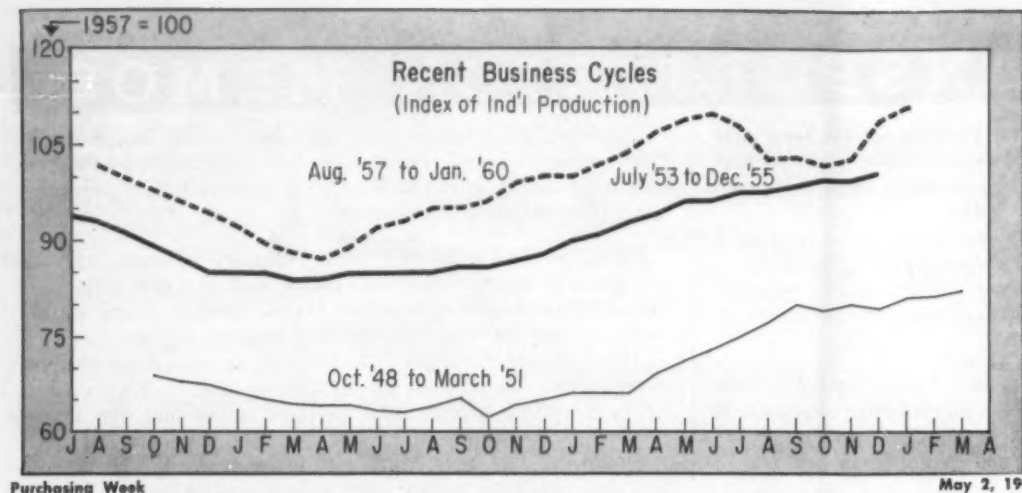
It's very likely that history will peg the latest business cycle as extending from August, 1957 to January, 1960.

### LONG RUN PROPS

A number of factors, however—both long and short run—point to continued prosperity, with industrial production close to the recent peak.

The long run factors involve:

- **The changed nature of the postwar business cycle.**



Purchasing Week

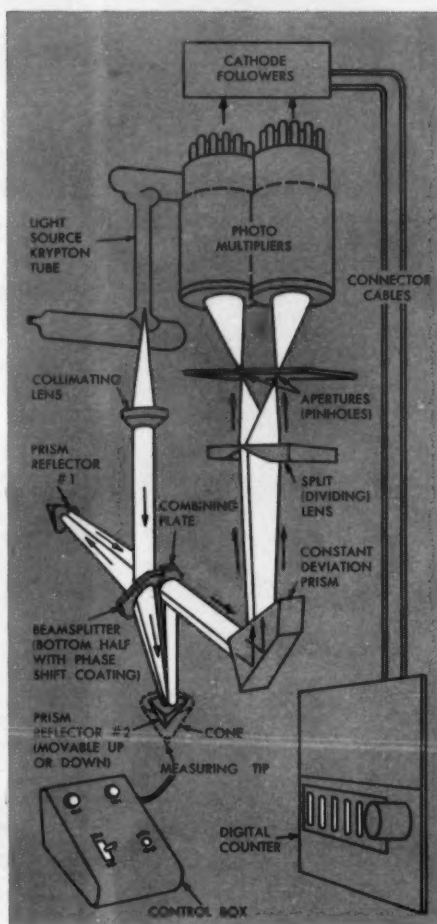
May 2, 1960

# There IS a Difference in STAINLESS STEEL STRIP

...when "tonnage is produced on a laboratory basis" —

At Wallingford, stainless steel strip having close tolerance specifications is thoroughly cleaned before final inspection because contaminants have weight; and non-contact gages measure all weight within the throat of the measuring head. A sample is then taken from the coil, delivered to a temperature controlled room and measured with a Fringe-count Micrometer — interferometer, control box and counter — to compare the thickness of the sample to the wave length of a krypton light source.

As the diagram at right shows, the movement of the measuring tip modulates the krypton light source and produces fringes which are detected and counted. This reading is then converted to thickness of the test piece. After measuring, the sample returns to the line; the gaging equipment is zeroed against the known thickness, and processing starts up again. By taking a sample from each coil, **it is almost impossible to have an error caused by variation in density between different alloys.**



**Do your suppliers measure close tolerance stainless steel strip with such exactitude? Why not purchase your stainless steel strip where tonnage is produced on a laboratory basis?**

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# Period Ahead for Business Activity

## • The accelerated rate of economic growth.

Recent business cycles differ greatly from their prewar predecessors.

Most important, the postwar cycles have been much shallower than those of the 1920s and 1930s. Before World War II the drops from high to low averaged 35% if we exclude the Great Depression).

Since the war the fall from crest to trough has averaged 12½% (see chart at left).

Another feature of postwar business cycles is that the jump from old high to new high in industrial production is greater than before the war.

Before 1940 new highs averaged 8% above previous highs. Since 1947 the average jump from high to high has been about 11%.

Shallower troughs and higher peaks are evidences of an accelerated rate of economic growth. This is borne out by the fact that since 1947 the economic growth line (see chart at right) has worked out to 3¾% a year, compared to about 3½% annual rate of growth between World Wars I and II.

And the growth rate looks to accelerate even more quickly in the 1960s. Some experts claim we can step up industrial production at the rate of 6% a year, if we concentrate on stimulating investment and intensifying research and development throughout industry.

Even if we just want to maintain present levels of employment and hours of work, we have to push up our growth rate to between 4% and 5%. That's the only way we can absorb an annual 1% to 2% increment to a labor force, whose output per man hour is increasing—through technology—at the rate of 3% a year.

Tilting the economic growth line upwards means lesser drops and higher new peaks for future cycles. Breaking this idea down further, we can say that increasing rates of population growth, higher standards of living, and greater stress on new products and techniques are long-run forces that will hold industrial activity at high and rising levels for some time.

## SHORT RUN STABILIZERS

But there are also factors that look to reverse slipping industrial production in the short run.

• **Increased capital spending.** Expenditures for new plant and equipment are slated for a surge (see page 1), and should provide a real stimulus to durable goods production.

• **Moderate steel inventories**

## and high retail sales prospects:

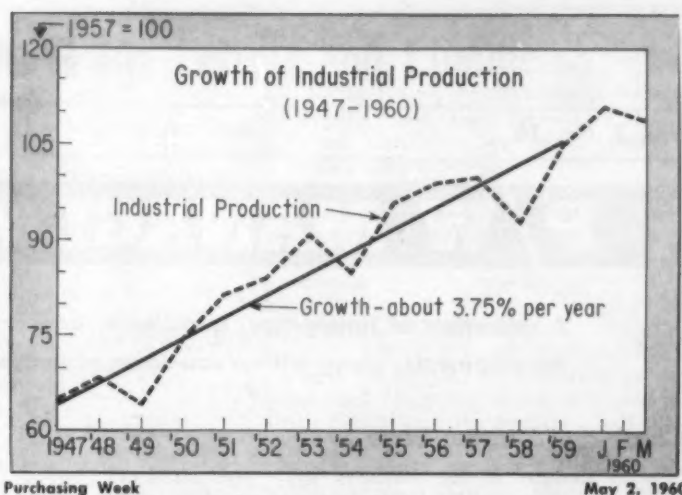
Steel inventories are rather low—about 17-million tons—for current business activity. With retail sales—especially in automobiles—stepping up briskly, it is likely that steel operating rate will pick up again in a couple months.

Other evidence for this is that the new orders for steel are running below the rate of steel consumption. That can't go on too long before new steel orders start on an upward push again.

## • Personal income and consumer spending:

Personal incomes are at record levels and consumer surveys show that customers are eager to buy.

Add to these factors, seasonal upsurges coming for oil production and construction activity—contractor orders for construction equipment are rising sharply—and you get a picture of comfortably high levels of industrial production for some time to come.



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If you're still sealing cases with staples, wire stitching or 6 strips of plain paper tape, you owe it to yourself to investigate 2-strip sealing with reinforced tape.

If you're now using staples or wire stitching, the Ludlow Method offers you:

- Up to 60 more cases sealed per hour.
- Greatly increased case strength and durability.
- Easier opening—no scratched contents or hands.
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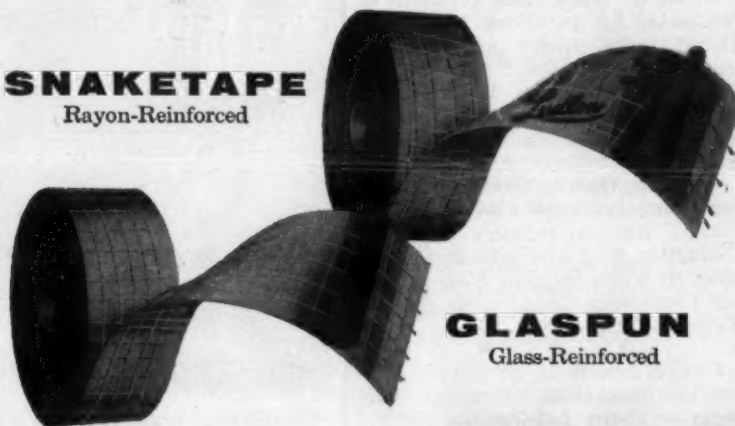
If you are now using 6 strips of plain paper tape, the Ludlow Method offers you:

- Labor savings of 66%.
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## P/W MANAGEMENT MEMOS

A collection of timely tips, quotations, and inside slants on management and industrial developments, along with a run-down of events and trends of use to the purchasing agent.

### Cloak and Dagger Boys

Beware of the business spy. The stranger who wanders into your purchasing office and casually asks for a set of blueprints may not be as innocent as he looks. He may, in fact, be a free-lance "information" specialist, who sells business secrets to the highest bidder.

Fortunately, most American businessmen consider this practice unethical. But it exists, nevertheless, as shown by a survey of 200 corporate executives, made by C.I. Associates, Watertown, Mass. Fifty-four of the managers said this kind of snooping was practiced in their industry—and some indicated it was on the rise.

The purchasing office is one of the biggest sources of leaks, the survey reports. The reason: Many of the salesmen and other visitors who come to your purchasing office carry out tidbits of information—which may go straight to the ears of your competitors.

### Report from Ulcer Gulch

"If I wanted to hire an associate, I would hire a man with an ulcer. He would work," says Dr. H. Marvin Pollard of the Univ. of Michigan. The average ulcer patient is typically younger, intelligent, hard working, and is in the intensely competitive phase of his career. However, he has one failing. According to Dr. Pollard, "He usually has not developed self-confidence. He lacks faith in his own ability."

**Pollard's remedy:** Slow down, avoid excesses of physical and emotional fatigue. Develop interests outside the office that are relaxing. Don't take yourself seriously. Good prescription for Springtime, isn't it?

### Cool Reminder

If you want to justify the cost of air conditioning, take a look at some productivity figures that the Office of Building Management at the General Service Administration, Washington, has assembled. GSA ran comparisons between two groups of office workers doing similar work. The air-cooled group came up with 9% more productivity, measured in terms of units of paperwork completed.

**The report (Technical Bulletin PBR 16) pinpoints four advantages of air conditioning in dollars and cents:**

- (1) A substantial increase in productivity.
  - (2) A measurable decrease in employee absenteeism.
  - (3) A slight decrease in clerical errors.
  - (4) A measurable decrease in employee living costs—laundry, cleaning, make-up, and the like.
- The payoff: better morale, more work done.

### Short Pointer

*A Bright Young Man, looking for a job with a top level firm as a material handling specialist, took aptitude tests at one corporation, and was elated when he was told he ranked "better than 99% on the company's middle management scale on computational ability, administrative skills, and ability to delegate." But the BYM quit in disgust after a few days when he found out how bad middle management was on these scores. Moral: All ratings are relative—but even so, don't forget that you can get ahead faster in an organization that is weak in executive skills.*

## PURCHASING PARADE

Personal glimpses of P.A.'s as they march by in the news

Here are four incidents that should bolster every P.A.'s ego:

• **John A. Pooley, P.A. for Mixer & Co. (Buffalo)**, distributors of forest products, has been elevated to the board of directors of the company.

• **Earl G. Ward, Vice President of Purchasing for the Ford Motor Co. (Detroit)**, was named general chairman of the 1960 Torch Drive.

• **Newton H. Webb, P.A. for The Cardwell Machine Co. (Richmond)** is chairman of the Richmond-Henrico Chapter of the National Foundation.

• **Chet F. Ogden, Vice President of Purchasing at Detroit Edison Co.** was selected for an Industry Founders Committee of 14 who will serve as advisors to a new Applied Management and Technology Center established by Wayne State University.

■ ■ ■  
Comparative notes on golf:

• **Al Shackleton, Graphic Arts Buyer at Cutter Laboratories (Berkeley, Calif.)**, winner of the Director's Cup in the Men's Championship golf tournament held last year at the Contra Costa C. C., scores in the mid-70's on the par 71 links.

• **J. F. McMillan**, newly appointed Buyer of Automotive Accessories for Firestone Tire & Rubber Co.'s home and auto supply division (Akron, O.), shoots in the low 90's; 'hen enjoys settling down with a good book, preferably historical.

• Meanwhile, **Leo B. Fisher, Director of Purchases at Continental Coffee Co. (Chicago)**, was the proud winner of a company sweater with a 79 in Continental's last Golf Tournament.



Better start brushing up on your art—you may find yourself buying paintings for an executive suite. And if you don't know a cubist from an impressionist, you may soon get the feeling that you yourself are being framed—or hung.

**Owen Lewis**, above, Director of Purchases for Piedmont Pub. Co. (Winston-Salem, N. C.), recently was called on to help buy some art work for the brass. But fortunately he had experience and know-how on his side:

Shortly after he became the new president of the Newspaper Purchasing Agents, he was elected president of Associated Artists of North Carolina. He's also active in the Arts Council

and has headed the Winston-Salem gallery of Fine Arts. He is a frequent speaker and panelist before what he describes as "fraternal, civic—and even women's groups."

"I learned early in life that I could do much better talking about art than producing it," he says. On modern art, he has this opinion: "When people say they don't see anything in modern painting, they are tacitly admitting that they don't know what to look for in any painting—modern or otherwise."

■ ■ ■  
Here's a P.A. who has a cheery way of talking about his company:  
(Continued on page 19)

## Purchasing Week



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Vol. 3, No. 18 May 2, 1960  
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## PURCHASING WEEK ASKS . . .

### When changing vendors, should the P.A. contact his present supplier and explain the reason for the change?

Question asked by: Chuck Hughes, Purchasing Agent  
Britt Sliding Door Corp., Houston



**LeNore Wartes, purchasing agent, Ketchikan Spruce Mills** (lumber, building materials), Seattle, Wash.:

"Generally, yes. To maintain satisfactory relationships with suppliers calls for mutual understanding and the Golden Rule was never more applicable than in this situation. Conditions change rapidly and the discarded supplier of today may well be the answer to a supply problem tomorrow. The vendor who understands your problems continues to help work for and with you. Thoughtful consideration of, and explanations to, suppliers at the time of a change (without becoming a price peddler) will lessen the possibility of ill feeling."



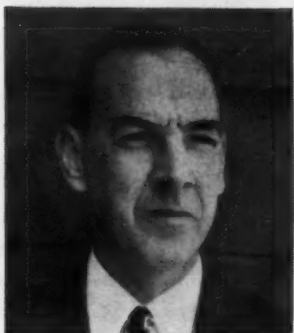
**J. L. Burgess, Jr., purchasing & production control manager, Arrow Tool Co., Inc.**, Wethersfield, Conn.:

"I think my function is more buying than explaining. As far as I'm concerned, if a change is made it should be apparent to the vendor that his sales force is not rendering the expected service. I feel that if I change vendors, the supplier should pick up the ball and ask us why he lost the business; or he should have his sales force find out the reasons why."



**H. E. Voll, purchasing agent, Evinrude Motors, Div. of Outboard Marine Corp.**, Milwaukee:

"If it will not disclose confidential information, it is our policy to meet this situation as squarely as possible—especially if the vendor be one of long standing. It has always been our desire to establish and maintain good public relations with our vendors; so if a decision is made to change suppliers, any advance notice will allow him to dispose of inventories as well as find other sources for his production. It may be that his services will be required at a later date, and the courtesy extended will pay dividends."



**J. R. Mathis, purchasing agent, Promat Metal Finishing Chemical Div., Poor & Co.**, Waukegan, Ill.:

"I object to the if's—and's—but's that P.A.'s use regularly in this column. My answer is an absolute yes! He is my supplier because I depend on him and expect the maximum cooperation. I in turn must reciprocate by keeping him advised. For example, quality control might change specifications and find a better raw material that a present supplier does not handle. This supplier has been stocking the old material and I certainly would not want him sitting there with a warehouse full of material I'll never use again."



**W. R. Bruce, manager of material, Convair Div., General Dynamics Corp.**, San Diego:

"Our policy is to contact the present supplier and explain the reason for our action—if it is not apparent to him. Where the necessity for the change is related to one or more of the basic elements in procurement—e.g. price, delivery, and quality—the supplier should have an explanation so that he may take remedial action in order that he may compete for future business. If the change is generated by some obscure reason that would appear unjustified unless explained, it would seem especially proper to inform the supplier of the reason for the change."



**W. R. Barton, manager of the material & production control department, Consolidated Vacuum Corp.**, Rochester, N. Y.

"As a matter of courtesy and good business practice, the P.A. should contact his present supplier and explain the reason for the change. A change in vendors points up the advantages of an adequate vendor performance evaluation system, particularly when a change is caused by poor performance. It is even more important to notify a vendor of a change when reasons other than poor performance necessitate the change."

## Follow Up: Letters and Comments

### Basic Materials

Minneapolis, Minn.

When I see "Burlap, Hides Boost Index" (PW, Apr. 11, '60, p. 2) in bold type on your Industrial Materials Price Barometer, I can't help but wonder how much weight is given to such unfamiliar items in your 17 basic materials. I would also be interested in what the 17 basics are and how they are weighted.

You, no doubt, explained all this at the start of your publication of this chart, but some of us missed it, or weren't paying attention.

William H. Furst

Purchasing Agent  
Western Oil & Fuel Co.

• Burlap and hides were chosen because it was found that in combination with 15 other commodities it makes for an index sensitive to small swings in the business climate.

The other commodities are: copper scrap, cotton, lead scrap, print cloth (spot nearby), lead (New York, pig),

shellac, tallow, aluminum scrap, rosin, rubber, steel scrap (Chicago), tin, wool tops, zinc, and copper ingot (New York refinery).

These 17 commodities are not weighted because preliminary testing revealed little difference as far as over-all index movement was concerned.

### Plastic Containers

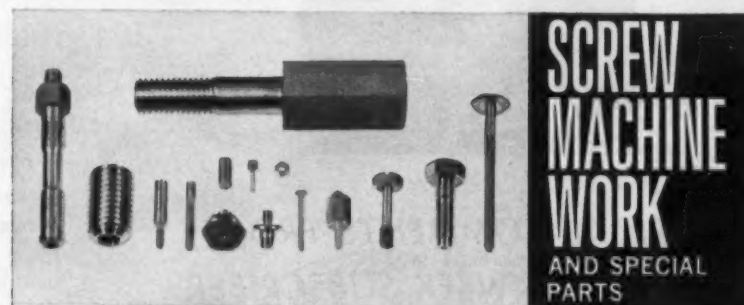
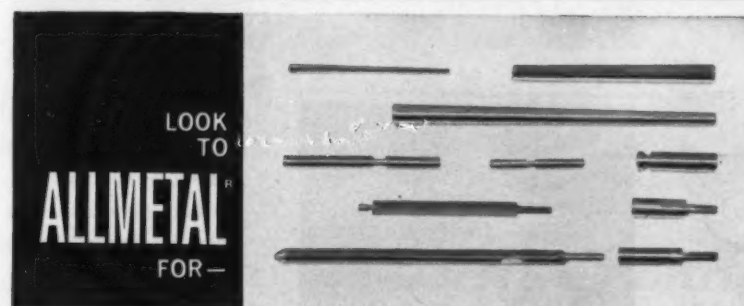
Jackson, Mich.

In a recent issue we noticed a picture captioned "Versatile forms of containers (like these) were on display. . . ." (PW, Apr. 11, '60, "Packaging Show Blossoms With Plastic, Foam, Film," p. 32).

Would you tell us the manufacturer of these plastic containers.

Lary Z. Mathany  
Sales Manager  
Needs Corp.

• Sheffield Plastics, Inc., Container Div., 500 Salisbury Road, Sheffield, Mass.



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—J. P. Moorhouse,  
Director of Purchases  
Standard Pressed Steel Company

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—Barry Shillito, Head of Material  
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# WHAT THE NEW PLANT AND EQUIPMENT BUYING PLANS WILL MEAN TO

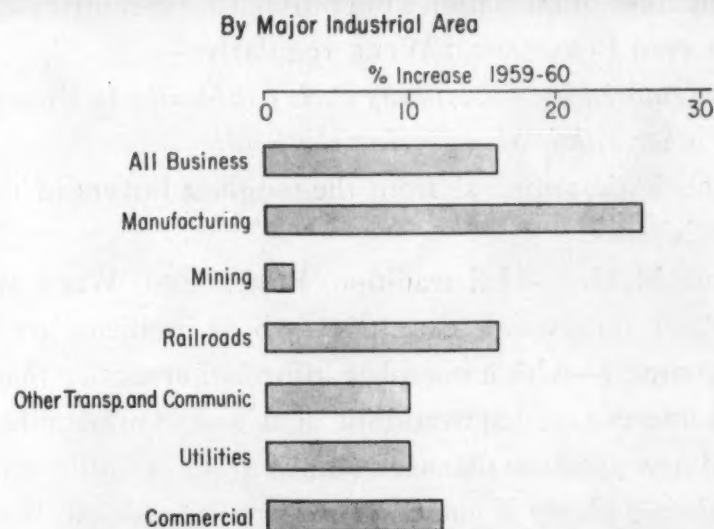
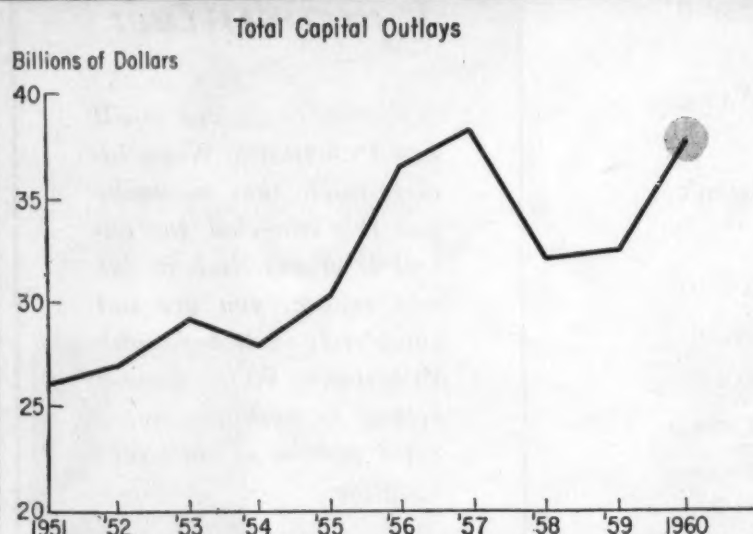
New capital expenditure plans for 1960 are surpassing all earlier estimates. New McGraw-Hill Survey now puts '60 outlays at \$37.9 billion, the highest rate in history.

What's more, advance plans for 1961-63 are almost as high. These latter years are usually underestimated because many firms have not yet firmed up plans that far in advance.

The new buying surge means:

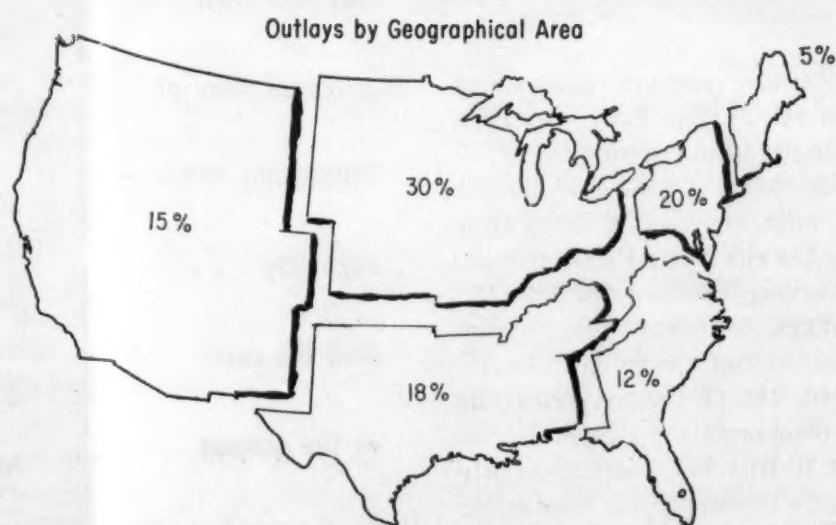
- Increased purchases of machinery and equipment.
- More efficient production — hence greater productivity and less inflation.
- Ample supplies — with little possibility of shortages in the years to come.
- Thousands of new products (stemming from new equipment), big increases in research.

## 1. Overall Trend Is Upward



## 2. These Are the Breakdowns

Specific Industries (Millions of Dollars)			
Industry	1959 Actual	1960 Planned	1959-1960 % Change
Iron & steel	\$1,036	\$1,637	+58%
Nonferrous metals	313	369	+18
Machinery	909	1,253	+38
Electrical machinery	519	763	+47
Autos, trucks & parts	641	1,064	+66
Other transport equipt.	390	468	+20
Other metalworking	876	973	+11
Chemicals	1,235	1,704	+38
Paper & pulp	630	788	+25
Rubber	190	266	+40
Petroleum & coal	2491	840	+14
Food & beverages	825	874	+6
Textiles	412	480	+17



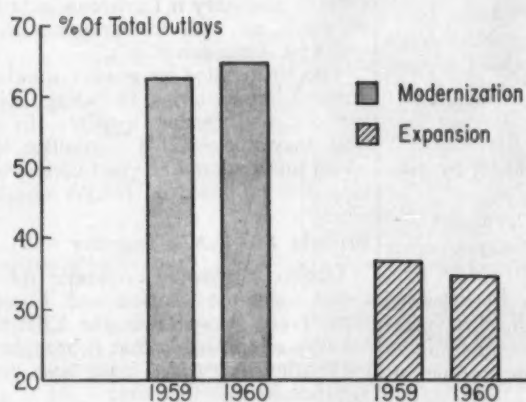


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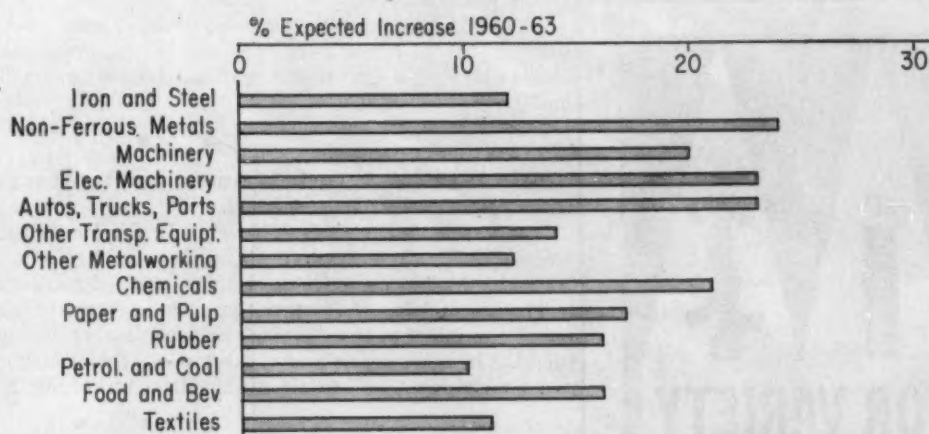
- How Much Plans Are Up
- Where Gains Are Centered
- Why The Rising Trend
- What The Effect Will Be

## 3. What Prompts The Outlays

More Modernization

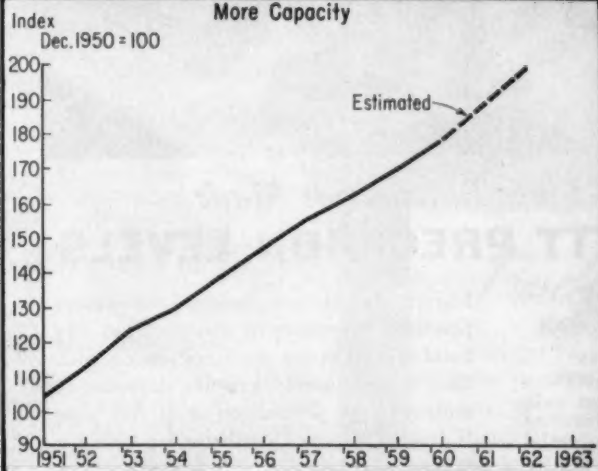


High Sales Hopes



## 4. The Payoff

More Capacity



New Products





## Israel Authorizes Project For Reclamation of Rubber With American Firm's Help

Tel Aviv—The Israeli government has okayed a plan to reclaim large quantities of scrap rubber by authorizing a licensing agreement between U. S. Rubber Reclaiming Co., Buffalo, N. Y., and Gamid Rubber Products & Plastics Ltd., Natanya, Israel.

### \$300,000 Plant

Under the patent and technical aid agreement, the American firm will supervise construction of a \$300,000 plant with an initial capacity of 7,000 lb./day. Eventually the factory will be expanded to a daily capacity of 20,000 to 25,000 lb./day.

Output of the new plant, which is scheduled to go on stream early in 1961, will be used for fire hose, tubes, and mechanical goods—all for export. Gamid is a subsidiary of Koor Industries & Crafts, Ltd., division of Solel-Boneh Ltd., of Israel.

This Week's

## Foreign Perspective

MAY 2-8

Tokyo—It looks as though a shipping-rate war is in the cards for the Japan-to-U.S. trade route.

The situation came to a head recently when Barber-Wilhelmsen Line, of Norway, walked out of the Japan-Atlantic and Gulf Freight Conference, a 19-member group composed of nine Japanese and 10 foreign flag lines. The Norwegians had asked the Conference to chop its freight rates 10% to 15% in order to compete with independent lines plying the same routes.

When the Japanese vetoed the proposal, Barber walked out, and the implications are they'll now compete with the independents on their own. Should the other European lines do the same, it could mean a return to the 1953 rate war, which saw shipping costs tumble from \$35/ton to \$10/ton on the Japan-to-Eastern U.S. run while Japan-to-West Coast rates fell from \$30/ton to as low as \$8/ton.

London—Tin prices are holding steady in London—but one market expert, A. Strauss & Co., feels they may not stay that way for long.

In its recent report on the tin market, Strauss said U.S. tinplaters have been relying less and less on Straits and English tin. They've been turning to Indonesia for their supply—a buying switch that could have adverse affects on London and Straits prices.

Indonesian ore, says the Strauss review, is being gobbled up by an unnamed Texas smelter. If this continues, the report indicates even the upcoming New York International Tin Conference may not be able to control world prices of the commodity.

Graz, Austria—A steel fabrication firm here has broken with tradition by constructing a circular-shaped plant.

The new design, says Stahlbauwerk L. Binder & Co., cuts internal transport distances 22%, decreases outside wall area 23%, and chops maintenance costs "considerably" in comparison to a similar-sized rectangular plant.

The 50,000-sq. ft. factory has two concentric production lines. In the center of the building is a "utility" pole containing the generator for all plant electricity. In addition to crane attachment, this center pole also has loudspeakers and a television "eye" to aid management in keeping a tight control on production.

Bonn—How big is big? Obviously, Alfred Krupp doesn't know or care. Now he's getting set to merge his entire coal and steel holdings into one giant company, called Huetten Und Bergwerke Rheinhausen, A.G.

The move comes despite a much postponed order by the Western Allies' high command for Krupp to begin divesting himself of some of his vast holdings.

Moscow—Hopes for an early easing of international rubber prices have been severely jolted by the recent Soviet purchase of 4,000 tons of natural rubber from the British government stockpile. That brings total Russian rubber purchases to 7,000 tons for the March-April period. Current rubber price outlook: Steady to higher.

New Delhi—The Indian government's supply of hard currency is now so low that it has turned to barter as a method of international trade.

The State Trading Corp., official agency set up to handle all barter deals, is now offering manganese ore as its biggest commodity. In return, the trade group wants to purchase as much steel—sheets, wire, tinplate, stainless—as it can lay its hands on.

Hamilton, Ont.—Steel industry P.A.'s are keeping a sharp eye on Steel Co. of Canada's plans to boost sintering capacity at its big works here.

The move, which would raise Stelco's over-all capacity from 2½-million to 3-million tons a year, is considered significant by steel-makers both here and in Pittsburgh because it marks another step in the successful application of the new self-fluxing sinter process for making iron.

The new process consists of feeding a mixture of iron ore, limestone, and dolomite into the sintering plant, where it is converted into clinkers and then fed to the blast furnace.

## Foreign Expert Urges European P.A.'s To Adopt U. S. Methods

Schaveningen, the Netherlands—European P.A.'s are turning to their American counterparts in an effort to bring overseas purchasing techniques up to date.

American purchasing methods, including value analysis, use of data processing equipment, and other techniques, were termed "admirably efficient" by Paul Gros, president of the European Federation of Purchasing.

### Information Sharing System

"We shall soon contact our sister organization in America," he told the second annual meeting of the EFP, "in order to arrange a system to bring some of their valuable knowledge" to Europe. Gros mentioned exchange visits and correspondence as one method of doing this.

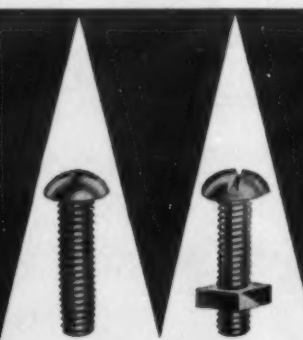
The delegates to the meeting agreed: Contact with U. S. purchasing associations is necessary if European industry is to catch up with the progress already made by American P.A.'s.

The EFP called for greater standardization of buying terms, including delivery, services, and product quality. In addition, they appointed a committee to set up an international conduct code—which may also be based on NAPA standards.

### Brought 240 P.A.'s Together

Despite a growing economic split between Common Market and European Free Trade Association, the EFP meeting was significant in that it brought 240 purchasing executives from both groups together for the first time.

The international conference, which dealt with general problems of the buying profession, resulted in unanimous agreement on one topic: American P.A.'s are way ahead of European buyers.



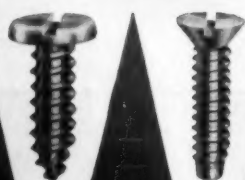
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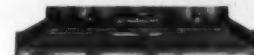
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## Foreign News In Brief

### 'Sell or Get Out'

**Paris**—Despite fierce opposition from privately owned oil firms, the French government has approved creation of a state-controlled oil refining and marketing company.

The new company, to be called Union Generale des Petroles, will take over majority control of U. S.-owned California Texas Oil Corp.'s refining, marketing, and maritime transport facilities under the terms of a "sell-or-get-out-of-France" contract. Caltex, in exchange, will get a one-third stock interest in the new company.

### Ford to Expand

**Coblenz, Germany** — Fordwerke A.G. and its parent company, Ford Motor Co., are currently dickering with town councilmen here over purchase of a 250-acre site for its new plant.

The new plant, which will employ some 4,000 to 6,000 workers, will supplement the company's car-production facilities in Cologne.

### Shadow Projectors

**Turin**—Microtecnica, a leading Italian manufacturer of precision testing equipment, has introduced four new types of shadow projectors to determine flaws in small dimension mechanical parts.

The four new models are the P-400, with a 400 mm. screen and episcopes; P-600, with a 600 mm. screen and episcopes; the P-1,000 with a 1,000 mm. screen for large profiles; and the MI, with 250-mm. screen (for laboratory and shop use). Hamilton Standard, division of United Aircraft Corp., owns a half interest in Microtecnica.

### Expand Aluminum Output

**Budapest** — The state-controlled aluminum industry will build a new stamping and extruding plant and a new rolling mill this year.

The extruding and stamping facility will have an annual capacity of 15,000 tons, while the rolling mill will turn out 40,000 tons of aluminum yearly. The current Hungarian Seven-Year Plan, which began in 1958, calls for a doubling of total national output of the light metal by 1965.

### Japanese Showplace

**Tokyo**—The Japan Export Trade Promotion Agency (JETRO) has set up a permanent showplace here for industrial products.

The new exhibition hall, called Japan Design House, will provide visiting buyers with "instant" data on all manufacturers whose goods are on display.

### Form Steel Subsidiary

**Toronto**—United Steel Corp., Ltd., has formed a new subsidiary to manufacture and distribute steel strapping. The new division, United Steel Strapping, Ltd., is expected to go on stream within three months.

### Pig Iron Plant

**Toronto**—One of Canada's most diversified industrial firms, Consolidated Mining & Smelting Co. of Canada, Ltd., is going into still another industry. Its new 36,000-ton/yr. capacity pig iron plant—first in the Canadian West—will go on stream in 1961 in Kimberly.

Consolidated, which is controlled by Canadian Pacific Railway, currently mines lead, zinc, gold, silver, and rare industrial chemicals. It also makes fertilizers and chemicals.

## Japanese Fair Introduces New Products

**Osaka**—American businessmen got a preview of what they'll be buying from thriving Japanese industries at the recent Japan Industrial Trade Fair here.

The big fair, which kicked off a \$1-billion export boom last year, provided these new-product features:

• **"Brain - controlled" rolling mill.** Yaskawa Electric Industries exhibited a miniature model of an automatic rolling mill, controlled by computers equipped with "parametrons"—a newly developed semiconductor.

• **People's car.** Mitsubishi Heavy Industries, Ltd., showed buyers its new Mitsubishi "500"—a tiny two-seater car designed to sell in mass markets for under \$1,000.

• **Pint-sized tillers.** Both Mitsubishi and Kubota Co. introduced their new "tiny tillers" designed to sell at prices low enough for the poorest of Asian peasants. The tiller may also be exported to America for sale to "back-yard" gardeners.

• **Transistorized radio-phonograph.** Highlight of the fair was

provided by the big electronics firms, such as Standard Radio Corp., which displayed the battery operated radio-phonograph combination. Described as the smallest of its kind in the world, it will be marketed in the U. S. by Standard's American distributor—Dumont-Emerson Corp.

Another Standard entry in the electronics export derby was a \$50 tape recorder—"just larger than a pack of king-size cigarettes"—which will be advertised as "an office-equipment necessity."



## Find the "other man"!

Find the "other man" and you'll find another reason why you should come to Carlson for your stainless steel plate and other stainless products. The "other man" is an unseen crane operator. He, together with the hook-up man directing the loading of a stainless head in our shipping bay, is working "after hours" for one purpose—to assemble and ship a customer's order fast.

Why? The customer's production schedule may have changed suddenly. Perhaps quick delivery is needed to repair a vital piece of equipment. Whatever the reason, the customer knows he can count on Carlson for exceptional service. For Carlson is accustomed to producing and delivering, fast, a wide variety of high quality stainless steel products.

Specialized Carlson service is as near to you as your phone. Call or write for prompt action. The phone number: DUDley 4-2800.

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# SBA Gives Hints on Getting Government Work

## Seminar Outlines Steps Small Business Can Take To Obtain Subcontracts

**Garden City, N. Y.**—If small businessmen want government contract work from military or prime contractors, they'd better get out pounding the pavements. Or see that their facilities are registered with Small Business Administration and Department of Defense procurement people.

Although it's federal government policy to see that small business gets a fair share of prime and sub-contracts, procurement people and P.A.'s looking for likely sub-contractors can't go out and drag them into the office. It's up to small business to take the first step.

Some 650 small business men, Defense Department buyers and prime contractor procurement people heard this message at an SBA sponsored seminar at Adelphi

**"This chart survey saved us work, time and money!"**



*"I used to order recording charts as frequently as we needed them. But not now. This simple survey helped me place a single long-term order for GC charts with automatic deliveries spaced to our requirements."*

You, too, can stop fussing with lots of little orders, for lots of different recording charts, from lots of different suppliers. Send for a GC Chart Survey Form. Merely list chart numbers and the quantity you use. Return your completed Survey to GC and they will send you free chart samples for your engineers to check and a firm price for filling all your chart requirements. If it looks good you can then place one order covering several months or even a full year. GC will make automatic deliveries to meet your needs.

In addition to saving time and clerical work, GC charts cost less because they are produced in such large quantities so efficiently. And their quality is guaranteed by GC, the world's largest recording chart specialists.

Start saving—and get quality and service. Write today for your chart survey forms.



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College, Garden City, Long Island. It was the first of a series SBA is running to bring small businessmen in the research and development field into contact with top local procurement men. This way, SBA hopes the little fellows will get to know the local government buyers and company P.A.'s with whom they will deal on contracts.

SBA invited firms from the New York metropolitan area, and felt that the turnout indicated the high interest in government procurement. Alfred Wiebe, Chief of the Research & Development Section, noted that among the registrants were 90 company presidents, 92 vice presidents, and 95 chief engineers.

### On the Buyers' Side

On the buyers side there were P.A.'s from Sperry-Rand, International Telephone & Telegraph, IBM, General Dynamics' Electric Boat Division, Pratt & Whitney Div. of United Aircraft, and others. Defense Department was represented by procurement people from the Signal Corps Lab at Fort Monmouth, N. J., the Navy Training Devices Center at Port Washington, N. Y., and the Air Force Research and Development Command.

Wiebe urged small businessmen to make sure they were registered with the local SBA office, and to keep the survey of facilities and personnel (Form 449) up to date. This is the file that SBA turns to when corporation or government procurement people ask them for vendors. "This lets them know what you can supply, and backs up your bids," Wiebe noted.

He told the seminar that the SBA "goes to directors of purchasing at large companies to stimulate interest in small business—in your behalf. (See PURCHASING WEEK Feb. 22, p. 28). We get calls every day from P.A.'s. They ask us for reputable sources of supply for things and services they want to locate."

Harry Stegeland, Small Business Specialist at the Air Force Research and Development Command, New York, also urged small business to register with the SBA, and to contact local procurement people and P.A.'s. "You have to meet the people who are in a position to handle contracts," said Stegeland. "You have to sell to both government contracting people and prime contractor P.A.'s."

ARDC has a program to help out small business on this count. The local ARDC small business specialist will get the small businessman to the right project engineer, procurement official or prime contractor P.A. But it involves red tape—registering at the SBA for one thing.

However, there's a new system (called "CATE") coming up which will speed vendors to officers in charge of buying their products. It's simply an IBM card that the vendor fills out, indicating his production specialties and personnel. Then a quick card sort and print-on computer gives the vendor a list of men and offices that can help the small businessman get contracts.

### 'Compete Where You're Best'

Although it will be easier to get contracting opportunities, Stegeland urged vendors to stay in their areas of knowledge. Trying to fool a procurement man won't work, because your mistakes will be caught on poor performance. "They have long memories," commented Stegeland.

John V. E. Hansen, Contracts Manager at National Research Corporation, Cambridge, told the small businessmen and P.A.'s that they can do a lot to improve their batting average on bids and proposals. One firm he noted, had only 3% of its proposals accepted in 1955. But after putting in a program of careful analysis on outgoing bids, the company now gets contracts on 10% of the proposals. This means tighter costing and

better planning—all points where the P.A. can help with materials prices and availability schedules.

Representing large business and prime contractors was IBM's J. W. Haanstra, Assistant General Manager of the General Products Div., White Plains, N. Y. He explained that although many large firms had excellent research, development and production facilities, they frequently went to sub-contractors for help.

There are good reasons for this: The corporation may not have capacity to do

ment procurement was a government-industry team operation."

As an example, he cited Tiros I, the new weather satellite that transmits pictures of cloud conditions back to earth. This information allows weathermen to make better forecasts of coming storms. The Signal Corps Lab provided some of the research and development that went into the electronics of Tiros, but "the assistance of many sub-contractors was needed," said Petrillo.

He also directed the attention of the

## For Help on Government Contracts and Subcontracts, Here's What You Should Do

### As a P.A. Seeking Subs:

1. Contact your regional SBA office when you need a vendor; the SBA will suggest several. Check other SBA offices for more.
2. Keep in touch with Defense Department Small Business Specialist in your procurement district.
3. Put a buyer in charge of small business relations. Have him keep track of products small businesses can supply; the special skills they have.

### As a Small Business:

1. Register with the SBA office by filling out a facilities and personnel survey Form 449. SBA will arrange a plant visit by one of its contract men to look over your plant and suggest products you can make.
2. Check with Defense Department Small Business Specialist. He'll keep you in mind for set-asides and sub-contracts.
3. Get out and meet P.A.'s at prime contractors near you.

the additional work at a particular time, and so must fall back on small contractors. Or, "because of our (IBM's) narrow product line, we frequently have to subcontract other kinds of work. We can't always obtain the technical competence in our own organization. Often we do better working with outsiders."

### Increasing Opportunities

IBM's Haanstra indicated that there would be increasing opportunities for small business in the area of solid state and semi-conductor circuit elements. Business computers of the future, he said, will depend on this type of circuitry for compact size and economy of operation.

"We procure a large part of our requirements for this type of product from other companies," Haanstra said.

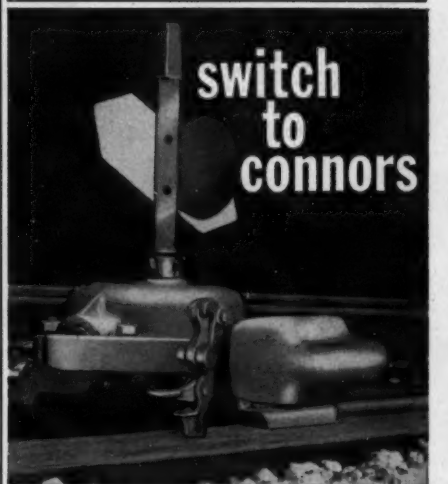
Not only will small business be producing the components for computers, they'll also be on the using end, too. Haanstra noted that computing devices, "were moving forward from the position of score-keeper to one of a player."

Computers formerly were the province of data processing specialists, accountants and research workers. "Now they are going into the decision-making phases of management. We're not talking just about keeping score; but moving in and controlling processes and making decisions."

Representing the Army Signal Corps Lab at Fort Monmouth, N. J., was S. E. Petrillo, Director of Engineering. Petrillo said that "effective research and develop-

P.A.'s and small businessmen to the electronics components field. Needed items for 1960 include power sources, batteries and semi-conductors. These will be used in Signal Corps communication equipment. More exotic sub-contracts are available for components that will stand up under the high temperatures found in missiles. These components will provide the works for satellite based, earth surveillance systems.

Firms without electronics capabilities can find good contracts in some of the devices described by John F. Bodenberg, Technical Director of the Naval Training Devices Center, Port Washington, N. Y. Bodenberg described contracts for training aids ranging from devices almost as complicated as a missile down to simple plastic and wood mock-ups. Here even the smallest firm can find possible markets.



For a complete line of light rail, trackwork and trackwork accessories call on Connors. Whatever your needs, Connors engineering staff can assist you in replacement or new track installations. Our one plant production allows shipment in mixed carloads. For more information or catalog, write West Virginia Works, P. O. Box 118, Huntington, West Va.

CONNORS STEEL DIVISION



## Small Firm to Compete With Giant IBM on Home Ground

**Binghamton, N. Y.**—A new firm, Tech Panel Co. is proving it is not afraid to compete with an industrial giant.

The company is building a small plant here to make and sell a line of control panels for use on IBM machines—in direct competition with International Business Machines Corp.

R. Ross Price, Jr., president of Tech Panel, said it was decided to locate the business here to take advantage of the "technical knowledge in this area" about IBM machines. He also noted that the Triple Cities area is within 250 miles of a large percentage of the nation's computer business.



## Bethlehem Negotiator Raps Big Union Power

**New York**—A leading labor relations specialist told members of the New York Purchasing Agents Assn. that much of the responsibility for rising prices must rest on labor's shoulders, since "stable prices and big unions are incompatible."

Speaking at the group's April meeting, John H. Morse, a member of Bethlehem Steel Co.'s labor negotiation team, hit out against what he termed the monopolistic economic and political power of big unions today.

Morse, a partner in the New York law firm of Cravath, Swaine & Moore, gave purchasing agents a capsule rundown on Bethlehem Steel's recent shipbuilding and steel negotiations with the unions.

Labor negotiations, he stressed, should be approached from the standpoint of the wel-

l-fare of the whole industry. "I think the the answer is," he said, "to change the area in which bargaining takes place. Bargaining must go back to the locality."

Officers of the Machine Tool Manufacturers Buyers Group, NAPA, have cancelled their proposed meeting at the NAPA national convention in May. John M. Stewart, chairman of the group, gave "lack of attendance by officers and members" as the reason for the cancellation.

As a result of the fight the steel industry put up, Morse said producers feel they did succeed in

controlling the inflationary aspect. The steel strike settlement was at first billed as a great union victory; however, he reported, employment costs were estimated to increase only 3½% to 3¾%—less than half the cost of the prior contract.

Morse was pessimistic about steel negotiations two years hence. "It is hard to say what the economic climate will be," he said. "We will face the same problem again. They want far more than can be absorbed by an increase in productivity."

## Use of Purchasing Manuals Is Urged

**Cincinnati**—Purchasing agents heard a double-barreled plea for wider use of purchasing policy manuals at the recent annual president's night banquet of the Cincinnati Association of Purchasing Agents.

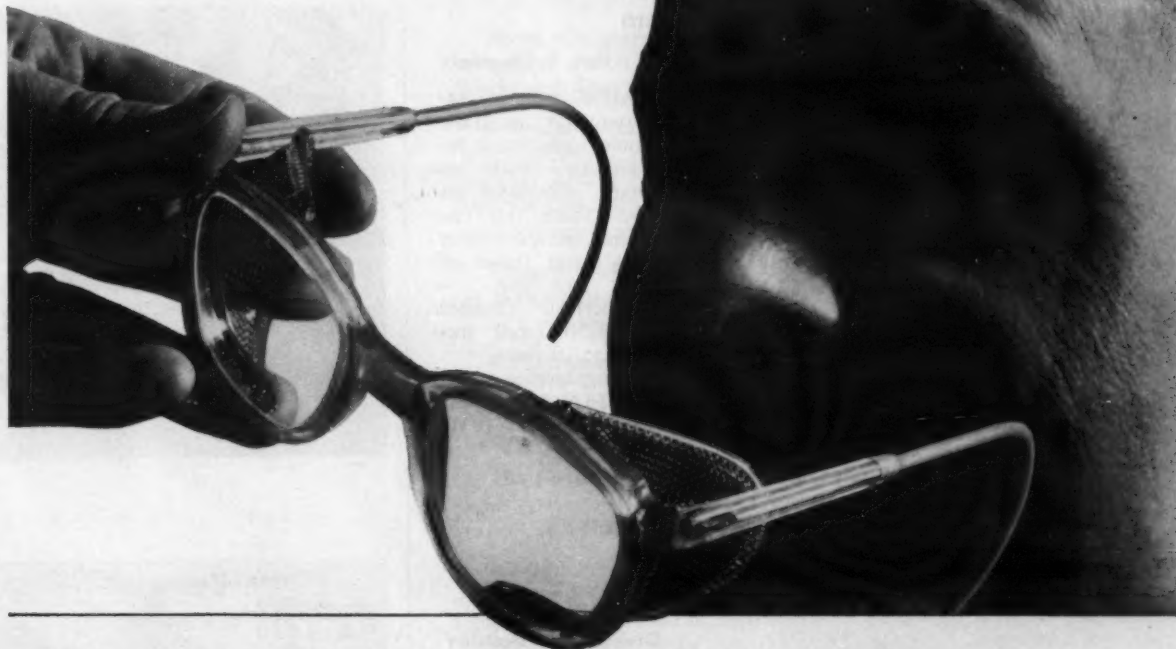
The meeting was a joint affair with the local chapter's Women's Division and members of the Dayton and Springfield Purchasing Agents Associations.

C. Warner McVicar, 6th District vice president and director of purchasing and traffic for Rockwell Mfg. Co., Pittsburgh, told the group that use of a pur-

chasing manual was one of four ways they could make "an imprint" on management. He also cited value analysis and standardization in buying, knowledge of what NAPA's Professional Development Committee can offer, and "making money savings for the company and reporting it."

In the major address of the meeting, Thomas O. English, NAPA president and general purchasing agent for Aluminum Co. of America, Pittsburgh, also urged more use of purchasing manuals in the major address of the meeting.

## VENTILATION plus Eye Protection



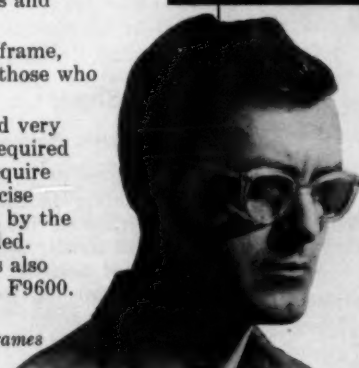
## Workers get 1,000 "Breeze Catchers" in Flexi-Fit with New Wire Mesh Side Shields

For Flexi-Fit, the goggle with the saddle type bridge that fits so many workers, AO has developed new side shields of black oxidized metal with acetate binding. The wire mesh screen offers an increased ventilation certain to increase worker comfort on hot jobs and humid weather.

Available heretofore only with a pink crystal frame, the goggle may now be had in mahogany for those who prefer this shade.

Introduced only recently, Flexi-Fit has proved very popular where plano eye protection alone is required because it simplifies fitting. Where workers require correction as well as protection, the more precise "tailored" fitting which can only be provided by the full range of eye sizes and bridge sizes is needed. Catalog No. F9600L. Flexi-Fit Safety Glasses also available without side shields — Catalog No. F9600.

Always insist on AO Trademarked Lenses and Frames



American Optical  
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Safety Service Centers in Principal Cities

### Quick Facts

- 1 Bridge size for each eye size (Eye sizes 44, 46 and 48 FV 7). Fits more workers than comparable goggles.
- Nonflammable, shape-retaining frame
- Patented eyewire holds lenses safely without strain
- Won't conduct electricity
- Comfort cable and spatula temples
- New mahogany frame — as well as pink crystal
- Your nearest AO Safety Products Representative can supply you

Your surest protection...AO SURE GUARD Glasses

fare of the whole industry. "I think the the answer is," he said, "to change the area in which bargaining takes place. Bargaining must go back to the locality."

"I am not anti-labor," Morse told P.A.'s "I firmly believe individuals should have some source of collective security but I do question the present conditions where unions have mo-

ANNE D. REPKO: recently named to Board of Directors of N. Y. Association. First woman to hold the post, she is purchasing agent for Austenal Co., a division of the Howe Sound Co.



## PURCHASING PARADE

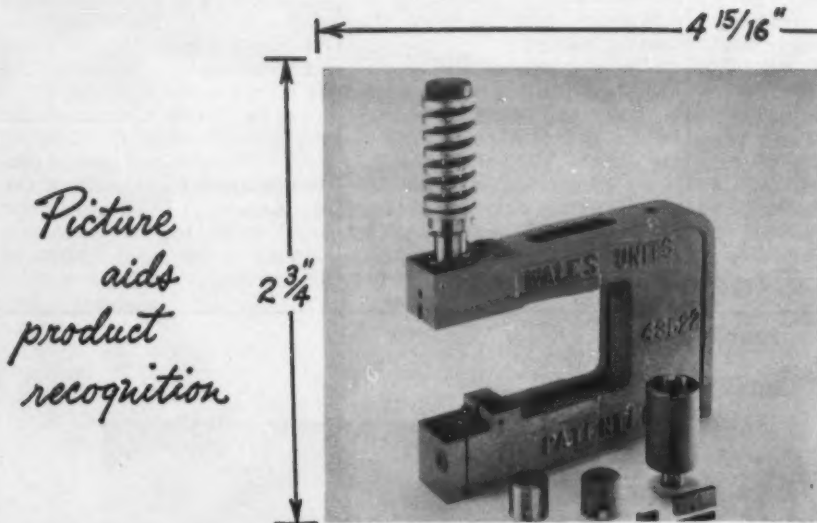
(Continued from page 10)

Allen Murray, P.A. for the Belmont Casket Co. (Columbus, O.), capitalizes on his droll "Digger O'Dell" type of humor at monthly association meetings telling strangers that "I'm in underground novelties" or that his company manufactures "the last word in containers."

Bachelor President: James B. Harrington, P.A. of Birmingham Paper Co., assumes his duties as President of the Purchasing Agents Association of Alabama next month.

He has the distinction of being the only bachelor president ever elected by the Association.





#### Punch

##### Makes Holes

Punch uses either button or pedestal dies to make round and shaped holes. While button unit allows 360 deg. rotation of shaped dies pedestal model can set shaped die in 2 positions, 90 deg. apart. Unit converts simply from round to shaped hole production.

Price: \$40.80 (4 in. throat) to \$71.25 (12 in.) round hole. Delivery: immediate.

Wales Strippit Inc., Akron, N. Y. (PW, 5/2/60)

*Size permits you to paste on 3x5 card*  
*Copy gives only pertinent details, cuts your reading*  
*How much it costs and how soon you can get it*  
*You'll know when item appeared*



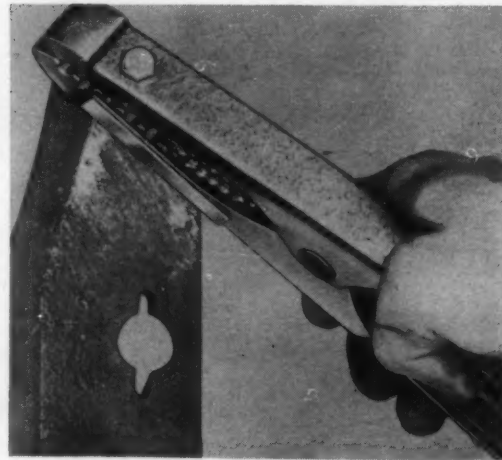
#### Intercom

##### Has 8 Channels

Eight-station plug-in intercom system has automatic volume control and noise reduction circuits—needs no cables. Static eliminator on front panel shuts out unwanted line noises. Grey cabinet has front panel of silver, black, and blue.

Price: \$131.80 (master station); \$76.50 (staff station). Delivery: 10 days.

Feiler Engineering and Mfg. Co., 8026 N. Monticello Ave., Skokie, Ill. (PW, 5/2/60)



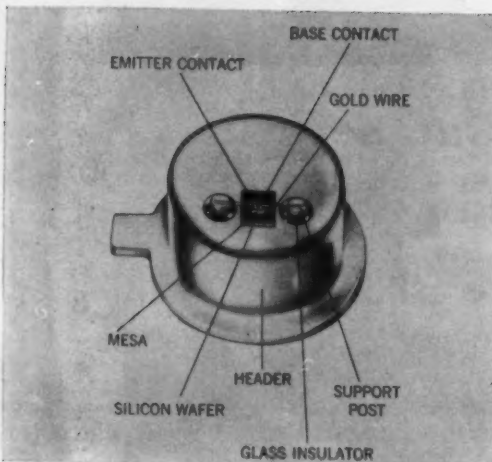
#### Clamp

##### Grounds Cable

Heavy-duty 300 amp. ground clamp runs the cable inside the handle up to the clamp jaws to reduce passage of electrical current through the handle and keep it cool. Design also keeps cable from twisting off where it enters the clamp. Jaws open to 2 1/2 in.

Price: \$3.95. Delivery: 1 to 3 wk.

Twentieth Century Mfg. Co., 224 W. 82 St., Minneapolis, Minn. (PW, 5/2/60)



#### Transistor

##### Gives High Stability

Silicon mesa transistor for switching applications in computer circuitry has an output capacitance of 5 mmfd. and a guaranteed minimum-gain bandwidth of 200 meg. Leakage current of the transistor at 150 deg. C is rated at just 3 microamps.

Price: \$37.50. Delivery: immediate.

National Semiconductor Corp., Danbury, Conn. (PW, 5/2/60)



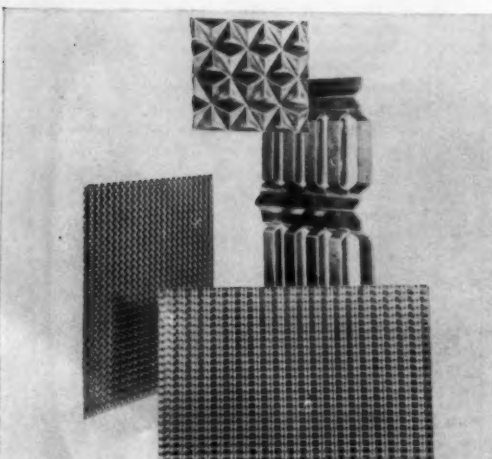
#### Briquets

##### For Investment Casting

Stainless steel and alloy melting briquets for precision investment casting are available in over 30 different alloys to exact specifications. The manufacturer also prepares briquets, on order, to other desired specifications.

Price: 20¢ to 65¢ per lb. Delivery: immediate.

Dreifus Steel Corp., 8 Cynwyd Rd., Bala-Cynwyd, Pa. (PW, 5/2/60)



#### Aluminum Sheet

##### Offers Classic Patterns

Aluminum sheet (4 ft. by 8 ft.) for building facades, display backgrounds, hand-rail panels, and similar uses, is available in 4 designs, in a choice of 11 finishes. Designs feature pyramids, flat top perforations, round perforations, or large vents.

Price: 58¢ to \$1.39 per sq. ft. Delivery: immediate.

Aluminum Co. of America, 733 Alcoa Bldg., Pittsburgh 19, Pa. (PW, 5/2/60)



#### Swivel Chair

##### Uses Torsion Bar

Steel swivel chair uses torsion bar to control tilting, has cantilever arms and foam rubber seat and back. Chair is available in a variety of fabrics, colors, and finishes, as are companion arm and side chairs.

Price: \$90 to \$109. Delivery: approx. 3 wk.

Harter Corp., Sturgis, Mich. (PW, 5/2/60)

# New Products

Another PURCHASING WEEK service: Price and delivery data with each product description.



## Scale Inhibitor

Treats Hard Water

Electrical device, connected to a standard a-c or battery source, causes hard water salts to precipitate as a fine powdery mass, and thus prevents the formation of hard scale in heat exchangers, condensers, evaporators, and water distribution systems.

Price: \$98 to \$2,750 (for pipe sizes 1/2 in. to 8 in.). Delivery: 4 to 10 wk.

Dehydrosal Systems, Inc., 521 Fifth Ave., New York 17, N. Y. (PW, 5/2/60)



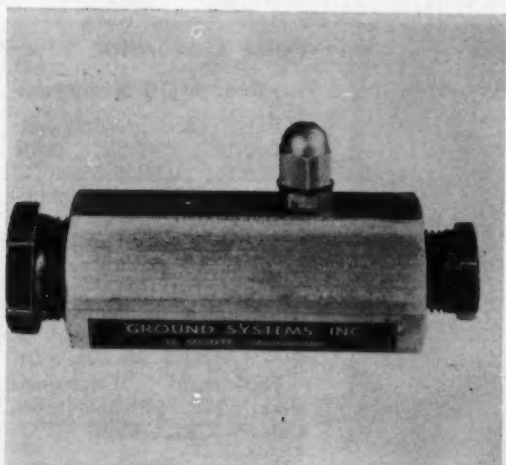
## Hoist

Lifts 1/2 Ton

Lightweight, spur geared hand hoist has working parts enclosed in aluminum alloy housing. It can lift up to 1/2 ton. Chain will not bind at any pulling angle, maker says. Seven other models are available with lifting capacities up to 10 tons.

Price: \$125. Delivery: immediate.

Thorn Machine Co., 3760 Fourth St., Winona, Minn. (PW, 5/2/60)



## Safety Lock

Protects Cylinder

Lock prevents hydraulic cylinder failure in high-pressure systems. Installed at cylinder inlet, the lock closes when a line break occurs, trapping fluid in the cylinder, to keep the supported load from dropping.

Price: \$49. Delivery: 2 wk. Ground Systems, Inc., 9752 Cortada, El Monte, Calif. (PW, 5/2/60)



## Vendor

Displays 130 Items

Automatic vending machine displays 130 cold food and packaged drink items for customer selection. Unit has maximum of 4 price settings, in any combination of coins between 5¢ and 50¢, but will not vend should the temperature of its refrigerating system rise above 50 deg. F.

Price: \$995. Delivery: 30 days.

Rowe Mfg. Co., 31 East 17 St., New York 3, N. Y. (PW, 5/2/60)

This Week's

## Product Perspective

MAY 2-8

• **Direct conversion of electricity from fuel** (without the usual turbine-generators and auxiliary equipment) is just over the horizon. Four methods are fighting for the honors—thermoelectricity, magnetohydrodynamics (MHD), thermionics, and fuel cells.

Conventional methods of making electricity haven't changed in principle since the first turbine whirled. Machinery has gotten more sophisticated and bigger, but has been held in check by limits imposed by rotating apparatus.

New methods under study do away with the moving parts and have theoretical efficiencies higher than anything now attainable. Experts think that MHD power stations can be built with over-all thermal efficiencies of better than 60%—this compares with the 40% to 45% rate of the most modern conventional plants. Present thermoelectric and thermionic generators are in the 5% to 10% efficiency range, but should pass the 30% mark by 1965.

These new power sources will affect auto and refrigerator design as much as central station power production. Here's a rundown on how each method works and what product areas the experimenters are aiming for:

• **Thermoelectricity.** Based on an old principle used in temperature recording instruments: When heat is applied to one end of two dissimilar conductive metals that are joined together the materials' negative electrons migrate to the cooler end. The resulting electric potential difference across the material produces a direct current through an external circuit.

Thermoelectric devices are close at hand—look for a wide number of uses in both small-scale generating units and heating and cooling devices. Next week's perspective will take a closer look at what's in store.

• **Thermionic.** Works on the same principle as the electron tube. As the cathode of the device is heated, electrons bubble off and cross the vacuum to the anode. D-c power is generated by hooking a load between the two terminals.

The thermionic concept is in the earliest stage of development of any of the four systems. It's too early to predict what ultimate markets may be, but expect small scale-units first.

• **Magnetohydrodynamics.** Term has been shortened to MHD by engineers who found tongue twister too much to handle in everyday usage. A hot ionized gas is passed at high speed through a magnetic field placed at right angle to the flow of the gas. The magnetic field deflects the free electrons in the stream towards electrodes. The electrodes carry the current to an externally connected load. If the magnetic field is direct current, d-c power is generated; if it's alternating current, a-c power will be made.

Minimum operating temperature of an MHD generator is 5,000 F. Current problem is developing materials that can stand this high temperature for long periods of time. Late last year, General Electric built a lab-scale device capable of producing 1,000 watts in 5 second bursts.

A short time later, Acco Corp. announced development of an 11,000 watt generator and said, 100,000-watt version was in the works. Westinghouse has just unveiled a 10,000 watt model with operation of over four minutes. It burns furnace oil and oxygen.

Research is aiming towards using MHD for central station power generation.

• **Fuel Cell.** An electrochemical device that converts "free energy" of a chemical reaction directly into electricity. It is a cousin to the common wet cell battery, but in contrast to a battery, the cell uses low-cost fuels (such as propane) and an oxidant. The fuel is fed to the cell continuously. The fuel cell contains no moving parts and can theoretically operate at 70 to 90% efficiency.

High-temperature cells might become competitive with conventional large-scale power sources in 10 to 20 years, but meanwhile, low-temperature cells (under 450 F) are angling for a number of jobs. Most immediate use will be for small, portable power source. GE's just announced 200 watt design for the Army is a signal that commercial applications won't be long in coming.

Material handling manufacturers have expressed much interest in cell-powered lift trucks and tractors. Allis Chalmers demonstrated a prototype farm tractor last fall and Yale & Towne is rumored to be working on a lift truck. All major auto companies are deep in experiments.

• How soon any (or all) of these direct-conversion methods reach the commercial point is up to the researchers. But there is no doubt in the experts' minds that direct conversion will have a huge impact on all product areas within the next decade.



# Your Guide to New Products

(Continued from page 21)



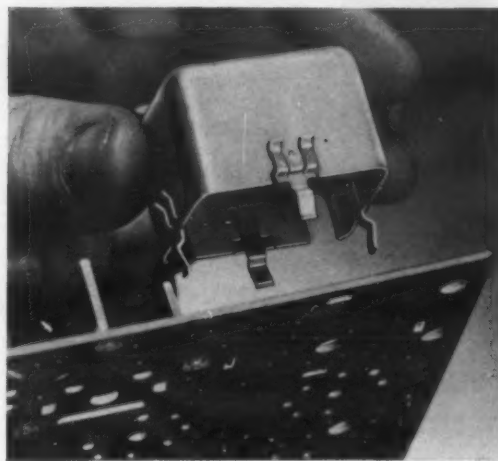
## Abrasive Disc

### Gives Visibility

Aluminum oxide abrasive fiber disc, in 7-in. size, has 2 parallel straight sides which let operator see work he is grinding as disc rotates. The device, also available in an 9-in. size, minimizes chances of burning or distorting the metal.

Price: \$62.80 per 100 (7 in.). Delivery: immediate.

Behr-Manning Co., 356 Howe St., Troy, N. Y. (PW, 5/2/60)



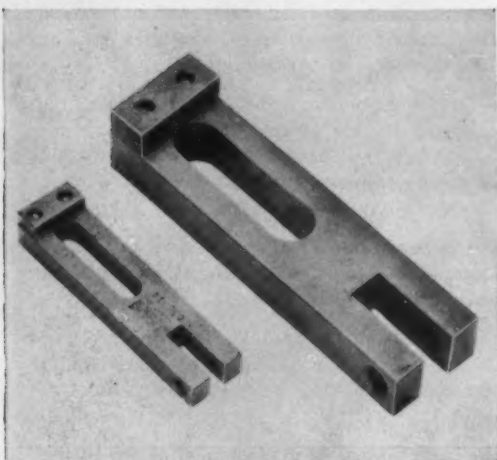
## Spring Clips

### Fit Circuit Board

Spring clips used to hold shielding cans on printed circuit boards come in chain form on reels, for machine application. Clip is fed and dimpled onto can in 1 operation. Soldered onto circuit board, the pretinned brass clip has high tensile strength.

Price: \$4 to \$6 per thousand. Delivery: 7 to 10 days.

Malco Mfg. Co., Dept. PW-7, 4025 West Lake St., Chicago 24, Ill. (PW, 5/2/60)



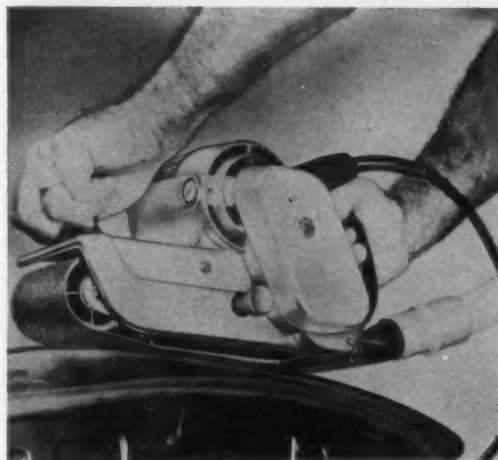
## Strap

### Holds Any Shape

Cam strap with soft metal pad, attached by 2 screws, holds any shape. Pads, available in sizes from 1/4 in. to 5/8 in., shape to fit work surfaces, and are easily changed. The strap is hardened, and has a black penetrate finish.

Price: \$1.95 to \$12.50. Delivery: immediate.

Jergens Tool Specialty Co., 712 East 163 St., Cleveland 10, O. (PW, 5/2/60)



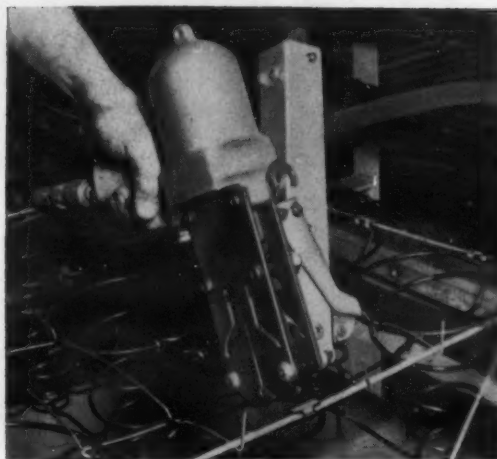
## Sander

### Picks Up Dust

Belt sander has vacuum dust pickup attachment, allowing simultaneous sanding and painting in same general area on resins, lead, or wood. Sander has a 4-in. belt and a gearless transmission which needs no lubrication. Device can sand flush up to vertical surfaces.

Price: \$94.50. Delivery: immediate.

Skil Corp., 5033 Elston Ave., Chicago 30, Ill. (PW, 5/2/60)



## Clipper

### Joins Wires

Portable, pneumatic clip applicator can clip 2 wires securely together in less than 1 second. Operating at a recommended air pressure of 75 psi., the magazine fed clipper is available in models that join either 7 through 11 gage wire, or 11 through 13 gage wire.

Price: \$295. Delivery: 2 wk.

Paslode Co., 5860 Northwest Highway, Chicago 31, Ill. (PW, 5/2/60)



## Pulse Generator

### Runs to 10 Megacycles

Pulse generator offers continuously variable pulse widths from 0.02 microsec. to 12.5 microsec., at continuously variable pulse repetition rates from 1 cycle/sec. to 10 mc/sec. Both positive and negative pulses are simultaneously available.

Price: \$2,400. Delivery: 4 wk.

Rutherford Electronics Co., 8944 Lindblade St., Culver City, Calif. (PW, 5/2/60)

## Purchasing Week Definition

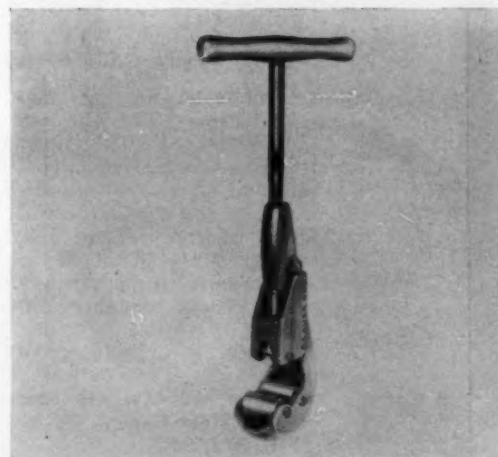
### Physical Characteristics

• **Hardness** is the resistance a substance exhibits to abrasion by another material. In metals, hardness is measured by three methods—the diameter of indentation a hardened steel sphere (Brinell) makes, the depth of penetration of a diamond-tipped rod (Rockwell), the height of rebound of a small drop hammer (Shore Scleroscope).

• **Stress** is the force producing, or tending to produce, deformation in a body. It is measured in terms of force applied per unit area. For example, a force of 5 lb. exerted on a surface of 1 sq. in. equals a stress of 5 lb./sq. in.

• **Strain** is the deformation that results from a stress. It is measured by the ratio of the change to the total value of the dimension in which the change occurred. For example, if a stress causes a 10 in. length of material to stretch to 11 in., the strain equals 1:10, or 10%.

• **Modulus of elasticity** is the stress required to produce unit strain. It may refer to a change of length (Young's modulus), a twist or shear (modulus of rigidity or modulus of torsion), or a change of volume (bulk modulus). (PW, 5/2/60)



## Pipe Cutter

### Prevents Spiraling

Pipe cutter cuts 1/8-in. to 2-in. material and has wide rollers to prevent spiraling. Wheel position allows quick, accurate setting to mark. Fast and easy cuts result as pressure applies directly to cutter wheel. Cutter can be used manually or with power drive.

Price: \$14. Delivery: immediate.

Beaver Pipe Tools, Inc., 360-40 Dana Ave., Warren, O. (PW, 5/2/60)



## Graybar President Forecasts Changes

**Cleveland**—Willard E. Henges, Graybar Electric Co. president, took a long look at coming changes in plant electric systems in a recent talk here. Speaking at the opening luncheon of the Electrical Industry Exposition, Henges predicted:

- More use of static switching devices to result from increased use of numerically control machine tools.

- High-voltage, d-c distribution lines.

- Electric space heating and cooling—possibly by means of peltier effect (reverse current junction method, in which current flowing through a junction in one direction provides heat and cools in the reverse direction).

- Common-place use of electrostatic dust collectors.

- Increased use of higher frequencies, currents and voltages.

- Footcandle levels of even higher limits than the 100 to 200 now considered good by illuminating engineers, with some estimates ranging from 400 to even 1,000 footcandles for specialized jobs.

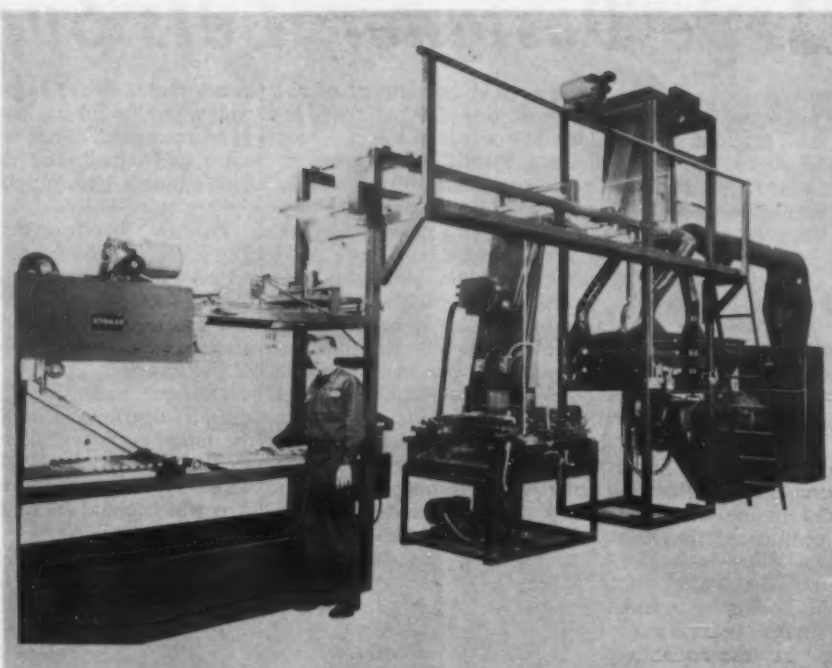
The 150 manufacturers at the exhibit gave buyers an opportunity to see the latest in electric gear. Plastic conduit got one of its first viewings and many manufacturers pointed up the trend towards aluminum in bus ways and auxiliary power equipment.

Switch, meter and circuit breaker manufacturers exhibited small, lightweight boxes designed to handle much higher capacities than previous models.

The trend towards plant load center electric distribution systems that brings load directly into several plant locations (instead of from a single service entrance) was illustrated by a variety of exhibits of load centers, transformers, capacitors, and high and low voltage switching gear.



W. E. HENGES



PLASTIC RESIN is loaded into right end of line—finished bags come out the other. Fully integrated system lets user keep close tabs on inventory. Bags printed in up to four colors.

## Integrated Plastic Bag-Making System Requires Only Occasional Supervision

**Philadelphia**—F. J. Stokes Corp. has introduced a completely integrated plastic bag-making system—resin granules are loaded in one end finished bags come out the other.

The Stokes equipment can make plastic bags up to 21 in. wide by 24 in. long, at production rates up to 120/min. Thickness can range up to 4 mils, and bags can be printed in one to four colors with or without vent holes.

The integrated system enables the bag-user to exercise complete control over inventories and production schedules and allows him to take full advantage of new raw materials as they are developed. It also eliminates the need for purchasing and stocking a large number of different thicknesses of films and for manipulating schedules of deliveries between film suppliers, printers, and converters.

The resin is extruded in the form of a hollow tube, which is inflated while still soft and stretched to the desired thickness. The tube is cooled and flattened be-

tween rollers and one surface electrostatically bombarded to roughen it to take the printing ink.

The film is printed in one, two, or four colors and passed through an oven to dry the ink. The printed plastic is fed continuously into a bag-maker which heat-seals one end and punches vent holes (if desired). The bags are cut to length and automatically stacked in two piles.

The entire system needs only occasional supervision—integrated controls constantly coordinate process conditions and compensate for variations as they arise.

The entire line will sell for \$50,000 including extruder. Delivery is being quoted at about one month.

### Where Can I Buy?

Some products are easy to locate, others difficult. Perhaps you can help one of our readers who knows exactly what he wants but doesn't know where to get it. And keep in mind that you can make use of this PURCHASING WEEK service at any time.

While you are answering our reader's request, would you also send us a carbon copy of your answer?

"We are looking for a source that can supply us with a flange wrench for use with cast iron companion wrenches. We understand this wrench is used by sprinkler installation crews."

**Carl K. Davis**  
Purchasing Agent  
Globe Machinery & Supply Co.  
East 1st and Court Ave.  
Des Moines 6, Iowa

"We are interested in receiving information as to where we can obtain steel wool washers, sometimes referred to as steel wool friction disks."

**Edward P. Fitzgerald**  
Purchasing Agent  
Photon, Inc.  
58 Charles St.  
Cambridge 41, Mass.

"We are looking for a source that can supply roll-to-roll printing. We need a continuous ruled form printed by offset in one color and delivered in rolls."

**Raymond L. Winters**  
Purchasing Dept.  
Ad-A-Day Co., Inc.  
175 W. Water St.  
Taunton, Mass.

## 'Standby' Spare Tire Deflates for Storage

**Buffalo**—The Dunlop Tire & Rubber Corp. has developed a new space saver—a spare tire that is stored deflated and blown up when needed.

Called the "standby tire", the spare consists of a narrow-section tubeless tire (less than 1-in. thick) mounted on a steel disk that has holes to match the wheel studs of the car. The entire assembly looks like a flat tray. The tire is inflated by a carbon-dioxide bottle that comes with the unit.

The tire, designed to enable a car to reach the nearest repair point, can run a "considerable distance" with only slight loss in car performance.

Dunlop expects the spare to cost substantially less than a conventional tire, but the company has no immediate production plans. Further development is being carried on by the Dunlop research and testing groups.



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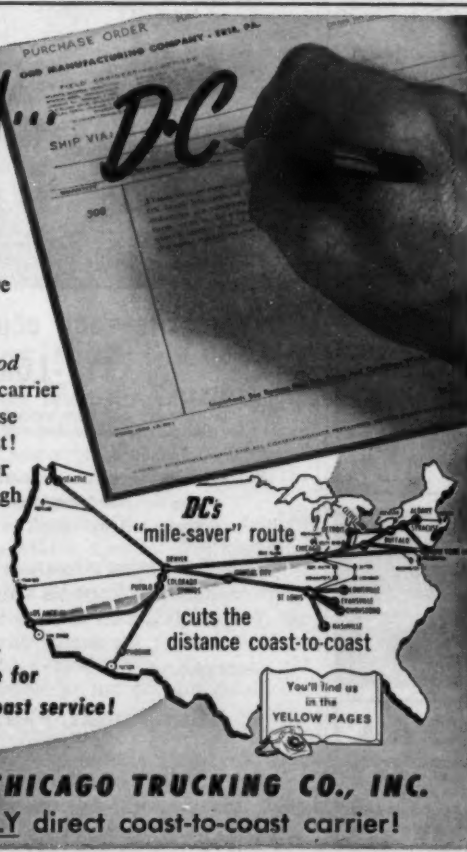
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# P.A. Turns Package Designer; Gets Surprise Award

## New Design Costs Less, Lowers Inventory, Wins Better Vendor Relations

Newark, N. J.—A purchasing problem got Federal Pacific Electric Co.'s P.A., Alan R. Dawson, into packaging design work for the first time in his life.

The results were amazing:

- Federal Pacific cut packaging costs 40%.
- Packaging inventory was reduced.

- New product sales rose.
- Vendor relations improved.

Not only that, Dawson's efforts won top honors in container design in a contest in which he didn't even know he was entered.

The award, presented several weeks ago by the Folding Box Association of America, represents an industry Oscar for artistic achievement. But Dawson credits purchasing knowhow, rather than knowledge of aesthetics, for the background that won him the honor.

Dawson's initial problem was this:

Federal Pacific is a company that specializes in making equipment used to distribute and control electricity. Through new products and mergers, the company's sales in 15 years have soared from \$1-million a year to \$70-million. Last March, it acquired, through a merger, the \$30-million-a-year Cornell-Dubilier Electric Corp., putting it into the electronics business.

Dawson, as buyer, spends

some \$3.5-million to \$5-million a year on fabricated products such as screw machine parts, stampings, and packaging.

About a year ago, Federal Pacific's top management decided to redesign its corporate image to reflect its growth as a modern progressive company and, in part, to offset some of its growing pains.

When the decision was made, deadlines were set, and Raymond Lowey's Associates were hired to restyle packaging and trademarks.

At the same time, to improve efficiency, purchasing of all packaging material in the firm's 20 plants was centralized in Dawson's hands.

Initially, Dawson's chief interest was in finding a vendor who could supply Federal's 45 carton sizes in the quantity (2.5-million annually) and under the conditions demanded. Experience had taught him that it was absolutely necessary to find a vendor who was reliable and could provide the needed service. In Federal Pacific's case, service meant warehousing 60 to 90 days' supply of cartons. In addition, the vendor had to be willing to hold cartons if sales were not up to anticipated demand.

After shopping around and conducting several facility surveys, Dawson chose Federal Carton Corp. of North Bergen, N. J. In many ways, he considers the firm an ideal vendor. "It's not too big to neglect our interests, and not too small to satisfy our needs," he said.

There was an element of risk involved. Federal Carton had not done \$50 worth of business with Federal Pacific when selected.

"We gambled on each other," said Alan L. Moscou, the supplier's sales representative on the Federal Pacific account. As a result of meeting service requirements, Moscou expects Federal Carton to receive about \$100,000 of Federal Pacific's business this year and has hope for a big share of Cornell-Dubilier's business.

Dawson and Moscou worked together to design uniform packaging requirements. One of the things they did was to standard-

assert that Lowey's organization "did a terrific job on coming up with trademark and specs for color and type." But there still was industry and supplier technology to consider.

Dawson, therefore, recognized that certain modifications were necessary. For example, on the original design, product information as to model, part and trademark appeared on only one end of the carton.

Dawson knew that Federal Pacific's distributors would juggle the boxes every which way when they used them. So he suggested adoption of a wrap-around design which could be seen in any

and buy from a blueprint," Dawson comments. "The P.A. must see how the product is used and know it well in order to do a first class buying job."

The second factor that upset purchasing's plans and forced P.A. Dawson to become a designer was Federal Pacific's own production and sales departments.

In the midst of standardization and the consideration of new designs, Federal Pacific developed a new product, a fusible circuit breaker called Stab-in Unit. Production and top management were anxious to introduce the new product in the new package.

Thanks to the cooperation and coordination established between Dawson and Moscou, the new package was being delivered within 45 days (60 days in advance of the deadline). The product was able to appear in Federal Pacific's new corporate dress.

Dawson firmly maintains that if purchasing had waited for blueprints with specifications, the deadline never would have been met.

As it turned out, Dawson's talent and impatience was a virtue which aided all of Federal Pacific's merchandising efforts. Dawson modestly disclaims any special credit by citing the old proverb, "Necessity is the mother of invention."

Both Dawson and Federal Pacific were surprised by winning the design award. It was not that they lacked confidence in their work. They knew nothing about the contest. Federal Carton had submitted the design together with the family of cartons which were part of the Federal Pacific new image.

The Stab-in carton won top awards for general merchandising, superiority in the hardware classification. Federal Pacific's red, yellow, and black carton was one of 33 winners selected from almost 4,400 entries.



DESIGN TEAM: Federal Pacific P.A. Alan Dawson (left) and supplier representative look over specifications for award-winning package.

ize on one carton thickness after consulting with various manufacturing and plant personnel throughout the Federal Pacific organization.

Another change was to drop the use of set-up boxes which were twice as expensive as folding cartons. Working with the supplier and plants, Dawson was able to develop quantity runs and cut carton costs drastically. In one case the price of a certain size carton dropped from \$100 per 1,000 to \$18 per 1,000. As a payoff from standardization work, Dawson expects to spend \$100,000 this year for what it cost Federal Pacific \$175,000 in 1959.

Although he had concentrated on working with his packaging supplier, Dawson had not expected to get into design work. According to textbook procedures, engineering would provide the specifications; all that would be necessary would be the placing of the order.

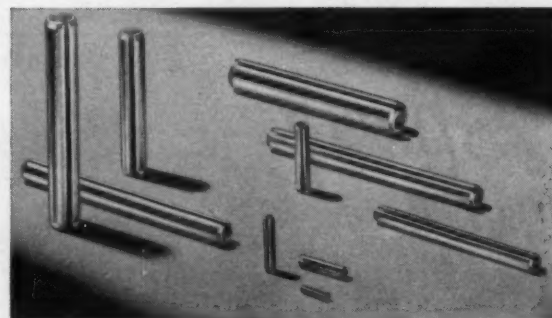
Two things scuttled this theoretical approach.

Both Dawson and Moscou

position. When Dawson looked about for someone to make the changes, he found himself alone. There was nothing to do but work it out himself, as he was the one who saw the defect.

Similar problems concerning color and type when introduced into production runs, also had to be corrected. Moscou notes, "If Dawson hadn't made the changes, no one would have made them."

"Buyers can't sit at a desk



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- Swift fastening—just drill and drive
- Can be reused repeatedly
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SEL-LOK spring pins are available in carbon and corrosion-resistant steel (from 1/16 x 3/16 through 1/2 x 5 in.) and beryllium copper (1/16 x 3/16 through 1/4 x 3 1/2 in.). See your authorized distributor for details or write us for Bulletin 2331 and samples.

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# Purchasing Perspective

MAY 2-8

(Continued from page 1)

new spots for supervisors without disrupting promotion opportunities of other employees.

• But only 2% of the 2,800 persons affected by new computer operations were shifted into computer staff jobs. Older workers and general clerical help were passed over for the new jobs although about 80% of the new computer jobs were filled from within. The remaining 20% came from outside.

• Principal characteristics of computer personnel: male, 25 to 34 years old, some college education, previous experience in accounting, procedure analysis, or related work.

**WHY EXPAND?**—With U.S. industry scheduled to embark on a new plant and equipment spending splurge (see story p. 1), how does this move to increase production capacity (by both modernization and expansion) stack up against already plentiful production and material resources.

Manufacturers, now operating at only about 85% of productive capacity, expect 1960 sales to increase by 8%. For the three-year period to 1960, the total additional sales increase is forecast at 17%.

If industrial salesmen meet their quotas, home offices confidently forecast that the increases will boost operating rates close to preferred levels. In fact, a further demand for additional capacity will be heard by 1963, McGraw-Hill economists predict. Meanwhile, current expansion plans call for a 5% increase in manufacturing capacity in 1960, plus about 4% per year over the next three years.

**BUYERS GUIDE**—A nonferrous metals industry expert said last week: "Considering the imbalance between the world's supply of copper and demand, the domestic price of 33¢/lb. has been living on borrowed time." Foreign demand is the big factor in maintaining the current price . . . U.S. Steel's chairman Roger Blough again soft-pedaled price fears at the corporation's annual meeting last week. Said Blough: "I don't see any immediate change in the general situation (prices), one way or the other." And he further noted steel consumers' "more conservative attitude" on inventories, declaring steel stocks and production are at matching levels . . . both big steel and General Electric spoke from the same script last week in emphasizing that steel, the electric equipment industry, and industry in general are facing a period of intense competition that places a premium on ability to produce new products and processes.

## ILA Threatens St. Lawrence Port Strike in Bid for Union Recognition

**Chicago**—A strike threat hangs over St. Lawrence Seaway ports from Buffalo to Cleveland as a result of the International Longshoremen's Association moves for new recognition and wage hikes comparable to deep water ports.

A meeting has been called for May 9 between shippers and the union. William Bradley, ILA president, has warned the owners there may be a strike May 15.

Behind the move is Bradley's desire to get the ILA again recognized as a bargaining unit and to ease the wage differences between Coast ports and the Great Lakes.

The ILA has been out of the picture since 1953 when the union was kicked out of the old AFL for racketeering. The pier union rejoined the AFL-CIO last year and took over contracts of the now defunct International Brotherhood of Longshoremen. Most of these contracts expired on or before May 1.

The ILA has promised to push for wage scales on the Great Lakes equal to those on deep water ports.

The basic rate on the New York docks is \$2.95 per hour; on the Gulf waterfront, \$2.75, and on the Great Lakes, \$2.33. Because of the wide differential it is believed the ILA will settle for less

than deep sea rates. According to one shipper, they will ask for the Gulf Coast scale.

While there is a clear danger of a strike, some shipping interests do not believe there will be one, and consider the May 9 meeting a face-saving device to clear up the question of union recognition.

As one major shipper here reported, "we're going to the meeting and we're willing to listen. We're right in the middle. We don't know who to negotiate with."

## New England Rail Lines End Merger Discussions

**Boston**—Merger plans have been scuttled by six New England railroads after almost 18 months of intensive study.

E. Spence Miller, president of the Maine Central Railroad and chairman of the Association of New England Railroad Presidents, said last week that the carriers have decided a merger or consolidation of facilities is not feasible at the present time.

The six railroads studying merger possibilities were the Maine Central; Boston and Maine; Bangor and Aroostook; Rutland; Boston and Albany; and New York, New Haven, and Hartford.

# Shippers Gear for Benefits as First 'Guaranteed' Rail Rate Takes Effect

(Continued from page 1)

became effective, since this type of rate has been bitterly opposed by truck and water carriers.

The confusion stems largely from the Commission's failure to issue a formal announcement or decision on the rate—one way or the other—and from the fact that truckers and water carriers did not file an immediate protest or apply for a court injunction.

Originally scheduled to take effect Apr. 10, 1959, the rate had been under suspension and study by the Commission for more than a year. Extensions of the normal seven-month suspension period, the last of which expired Apr. 23, were agreed to by the Soo Line.

Only recently, the ICC asked for a further extension, but the carrier felt it could not agree, with the lake shipping season approaching. So the guaranteed rate went into effect last week. The Commission still could rule out the rates, however, when it completes its formal investigation a few months hence.

The Soo Line rate involves a contract with only one shipper—Mannesman Tube Co. of Sault Ste. Marie, Ont.—and also applies over the Duluth, South Shore & Atlantic, the Milwaukee Road, and the Chicago & North Western Roads. Together these roads form alternate routes over which the oil field pipe shipments could move.

Under the contract, Mannesman Tube will pay \$10.05 per ton if it ships 90% or more of its total tonnage of pipe moving to Chicago by rail. Otherwise the rate will be \$12.18 per ton, the normal tariff rate on shipments of this type.

Other conditions include:

• The shipper must notify the railroad 60 days in advance that he intends to use the guaranteed rate.

• He must furnish an indemnity bond, agreeing to pay the normal tariff rate if his total tonnage falls short of the 90%.

• Freight charges must be prepaid.

• The shipper's traffic records, insofar as they relate to the guaranteed rate, must be made reasonably available to rail representatives.

"The advantages of guaranteed rates are tremendous," said Ross L. Thorfinnson, Soo Line's vice president of traffic. "The shipper knows what his transportation costs will be for a full year."

"The railroads know how

much business is coming, and they can prepare for it accordingly. Knowing these things in advance, we can quote a lower rate, which again benefits the shipper."

The New York Central agreed charge is contracted with Mohasco Industries, Amsterdam, N. Y. The rate, covering rugs and carpeting, is \$1.55 (cwt) for the first 30,000 lb. in a car and \$1.25 (cwt) on everything in excess of that. To get this lower rate, however, the shipper must agree to ship 80% of his tonnage via the Central.

These new rates actually were test cases for both railroads, with the Soo Line charge being the original "Guinea Pig" placed before the Commission.

Now the Soo and the Central intend to follow up their initial success with a number of other guaranteed rates. While the Central declined to reveal what it has in the works, the Soo Line said it is working up similar rates for scrap iron and residual fuel oil.

Meanwhile, as a result of last week's ICC decision confirming their Plan III piggyback rates, freight forwarders are gearing for a major expansion of piggyback services.

Over 2,000 separate piggyback tariffs now have been filed with the commission by freight consolidators—specific rates on volume shipments from point to point across the country—"with more on the way." In addition, at least one New York-based forwarder is planning "a large purchase of trailer equipment."

"Not only has the ICC ruled in favor of us," one industry leader told PURCHASING WEEK "but many shippers themselves have indicated they are strongly in favor of our piggyback operations under Plan III." Under this service, he pointed out, shippers will benefit by:

• **INCREASED SPEED:** Forwarders say Plan III service will offer shippers as much as one-third faster deliveries because of combined rail-truck movement.

"As an example of the improved service," a spokesman for Lifschultz Fast Freight, New York, told PW, "we'll be able to provide second morning delivery from New York to Milwaukee, while the same shipment by rail box car would take three days."

• **LOWER RATES:** The ICC decision involved volume rates

based on a flat fee piggyback rate offered by the railroads of \$451.50 to haul two loaded truck trailers between New York and Chicago with the shipper furnishing the trailers. The rates are about 12% to 16% below regular rail and trucking rates.

• **REDUCED OVER-ALL COSTS:** Because shippers can cut down on the quantities they must ship or receive to obtain bulk rates, they'll be able to cut down on inventory investment. Also, actual handling costs will be lower.

"The purchasing agent, above all," commented a spokesman for Republic Carloading Corp., a New York freight forwarder, "knows the cost of maintaining and warehousing big inventories. Because he'll now be able to buy smaller quantities, and still get essentially the same bulk transportation rates—and faster speed—he'll come to us for his shipping."

The Republic official, along with other forwarders, denied charges by motor carriers that freight forwarders are "trying to put the trucker out of business."

"The fact that our trailer-on-flatcar volume has increased over the past few months has not hurt the trucker," he said. "His business has also risen considerably. There's room for both the motor carrier and forwarder in transportation."

Major motor carriers disagreed, however, charging that the ICC ruling is a "complete violation" of the concept of U. S. transportation policy.

## Chicago & Eastern Illinois Reported in Rail Merger Talks With N. Y. Central

**New York**—Merger discussions are reported underway between the New York Central Railroad and the Chicago & Eastern Illinois Railroad.

Alfred E. Perlman, New York Central president, recently disclosed that the road was considering a merger with another line, but did not identify the line.

C&EI has been interested in joining with another road for a number of years. It carries a large volume of soft coal and serves the Midwest from Chicago, south to St. Louis and Evansville, Ind. C&EI connects with the New York Central at Chicago, St. Louis, and Terre Haute, Ind.

## Price Changes for Purchasing Agents

Item & Company	Amount of Change	New Price	Reason
<b>INCREASES</b>			
Gasoline, Esso, selected upstate N. Y. areas, consumer tankwgn., gal. ....	.01	....	seasonal demand
<b>REDUCTIONS</b>			
Aldehyde, C-8, lb. ....	\$1.55	\$3.60	competition
Menthol, Brazilian, lb. ....	.10	\$8.40	quiet demand
Niacinamide, USP, lb. ....	.50	\$6.25	competition
Gum turps, So., gal. ....	.01	.50	improved supply
Copra, Coast, ton ....	\$2.50	\$200.00	improved supply
Bone meal, ton ....	\$2.00	\$76.00	improved supply
Animal tankage, per unit nn ....	.15	\$4.35	improved supply
Citrol, CP, bats, lb. ....	.15	\$3.60	improved supply



## Late News in Brief

### Mitchell Proposes ICC Overhaul

Chicago—Secretary of Labor James P. Mitchell last week called for a gradual elimination of government subsidies to railroads and a "fundamental overhauling of the Interstate Commerce Commission."

Speaking before the railway employees' department of the AFL-CIO, Mitchell said the time had come for a change in national transportation laws as well as systems for collective bargaining. He called for an early settlement of the labor-rail dispute now threatening paralysis of the nation's transportation.

### 'Modernize Rates—or Else'

New York—Common motor carriers were warned last week to modernize their rate structure or face possible extinction.

Speaking before the National Association of Shipper Motor Carrier Conferences here, F. S. Thompson, traffic vice president of Western Express Co., Cleveland, said truckers today should cease "making up on apples what they lost on potatoes," and aim for consistency in all traffic rates.

### Machine Tool Orders Rise

Washington—The National Machine Tool Builders Association last week reported a rise in machine tool orders for the first quarter of this year to the highest level since the same period in 1957.

The present level of \$178-million worth of orders, however, is still 19% below the 1957 figures. The Association attributed the rise to an increase of orders from overseas. Exports represent some 24% of current orders, the report stated.

### Texas Wins Injunction

Austin—The State of Texas has won a permanent injunction and a \$15,000 judgment in an antitrust suit against a major manufacturer of engineering drafting equipment.

In ruling for the state, Judge Charles O. Betts, 98th District Court, said that Hamilton Manufacturing Co. had, in fact, fixed the prices its distributors had submitted under sealed bids to the state.

## Disposable Tools Get Spotlight At Detroit Engineering Show

(Continued from page 1)

is that there is no reason why tool prices should be increased in the light of steady material and labor costs.

Drill makers attribute the increases to "readjustment," but this term brought a very indignant comment from a user, who told PW, the current hike makes a total boost of 24% in nine months. "I think that it took a hell of a lot of nerve for them to throw an increase at us now," he said. "Many distributors are known to be keeping old prices—even after issuing new lists."

Small drill makers haven't gone along with the increase, but have adopted a wait-and-see attitude. "Personally I don't think the current 12% will stick but if it does, we'll raise our prices to the industry average," was a typical comment.

Although use of disposable tooling has been increasing slowly in recent years, current industry interest has made "throw-aways" tooling's "hottest product."

Manufacturers have expanded their insert lines to include almost every type of cutting operation and a wide selection of sizes and shapes are now available. Major reasons for the switch to disposables: high cost of downtime and lack of skilled labor.

Newest inserts are being made with as many as 20 cutting edges. The operator loosens a screw and rotates the insert to a sharp edge as soon as one edge is dull. When all are used, the tool is thrown away.

This contrasts with the old practice of regrinding an entire tool every time a new edge was

needed. Moreover, skilled labor was needed to regrind the tools and no two operators did the same type of job. "With inserts, the manufacturer knows that he is getting the same cutting edge every time," an official for a cutter manufacturer explained.

Chrysler Corp's Joseph Heilmiller reported that "parts produced per cutting edge have increased as much as 50% with throwaway tooling. We now have established that there is more tool life in the mechanically held carbide tip than in the brazed-tip construction tool."

Toolholders are being designed with built-in adjustment features to allow the operator to get precise tool settings without making half-a-dozen cuts. New micrometer setups allow putting the tool into final adjustment after a single trial run.

The micrometer is giving way slowly to electronic and air gages. "There's no other way to measure accuracies of a millionth of an inch—and that's what we're working with today," one gage maker noted. "We can measure everything from thickness to surface roughness electronically," he added—and he was surrounded by the instruments to prove it.

A variety of devices to automate machine tools were on display, but exhibitors expressed the belief that progress towards automated tools were moving at a snail's pace.

"We have no trouble selling management on what we can do, but when it comes to the unions—that's a different story," a salesman explained, while demonstrating air-powered cylinders designed to automate grinding.

## U.S. Steel Enters Thin-Skin Plate Can in Battle With Aluminum, Plastics for Container Market

(Continued from page 1)

new plate has great potential for both general line and sanitary-type cans. He said its use would require some change in can manufacturing facilities—but not a complete change.

The new product has added strength and rigidity, according to the U. S. Steel official, quali-

ties that may be helpful in maintaining the high-speed production of modern can manufacturing and for obtaining the desired rigidity in the finished container—along with lighter weight.

"From the work we have done thus far," Meneilly added, "we believe the lighter plate can be an economically sound product

for can manufacture. It has very high potentials in many areas. Among them are cans for frozen concentrates, quart oil cans, and cans for detergents and paints."

Aluminum and plastic containers have been making rapid inroads into these markets—aluminum for frozen concentrates and oil, and plastics for detergents and household products.

An American Can Co. spokesman confirmed that Canco is pushing ahead its research and experiments with the new product, but agreed with Meneilly that no one can predict just when it will be available commercially.

The best estimates, however are that the new tinplate will not reach the market for over a year—until new rolling mills are built to make it.

A spokesman for Continental Can Co., Inc., told PURCHASING WEEK that Continental has been experimenting with the new tin plate for a year and has found test results encouraging. "The tensile strength of the tin plate is adequate," he said, "but it has increased stiffness and hardness which cause certain problems in can-making lines. We don't feel all the bugs are ironed out yet."

## Government's Electronic and Metal Buying Practices Come Under Fire

Washington—The General Accounting Office has blasted the Administration for its procurement practices in acquiring certain electronic equipment and metals.

In two separate reports sent to congress this month, the watchdog agency charges:

• The Army was overcharged \$620,000 for ground radio communication sets under a contract with Collins Radio Co., Cedar Rapids, Iowa. GAO alleges that a 10% excise tax on all spare parts used in the radio was included in cost estimates prepared for the Army, even though the excise tax did not apply in most cases on equipment sold to the government.

• The General Services Administration entered into a \$27-million contract with National Lead Co., New York, to stockpile cobalt, nickel, and copper that wasn't needed.

In the case of Collins Radio, GAO says the Army recovered some \$685,000 on the contract. GAO says the Army has given assurances that steps have been taken that should help prevent a recurrence of such pricing practices on future contracts.

In the case of National Lead, GAO says the General Services Administration in December, 1956, issued a contract to the company with the aim of helping expand the nation's productive

capacity for nickel, cobalt and copper. At the time, GAO says, there was no need for such a contract because the government already had adequate stockpiles of the three metals.

GSA contends that it was merely carrying out instructions from the Office of Civil and Defense Mobilization in arranging a contract. OCDM argues there was a need for the metals at the time of contract negotiations.

However, the government in January of this year cancelled commitments for purchase of a remaining \$10.5-million of the metals. In settlement, \$2.5-million in surplus nickel was turned over to National Lead.

## Economics Professor Tells P. A.'s: Buy Here or Abroad, as You See Fit

(Continued from page 1)

concern themselves with this question at all. "Some American businesses will be hurt under free trade, but long term benefits outweigh protectionist tariffs," he declared.

"The calamity howlers generally are the marginal operators, who operate on the 'buddy-buddy' golf course or bar system of selling, not those capable of good competitive merchandising," he added.

Alvaro Vito Beltrani, St. Louis' Italian consul suggested too many American businessmen are running to a wall because of a few setbacks in overseas trade. However, he declared, "the best way to world peace is free international trade."

He suggested business concentrate on techniques that made the U.S. the No. 1 capitalistic nation—new products for mass production.

"High tariff walls will not help America, but restrict trade all over the world," he declared.

Other speakers, however,

urged P.A.'s to take a closer look at home industries.

Leo G. Peck, vice president, Peck's Products, St. Louis, said most local firms offer P.A.'s nearly all needs—and that "a local market when properly utilized spells out lower inventory and solutions to buying problems as close as your local telephone call."

Joseph P. Clark, head of St. Louis AFL-CIO Central Trades and Labor Union, representing 150,000 St. Louis area unionists, said that, although labor has "consistently favored reciprocal trade, the federation is becoming increasingly concerned" about some types of foreign competition.

"When you see union auto workers drive out of assembly plants with foreign made cars while their own industry is suffering, it makes you wonder," he declared.

E. F. Andrews, director of purchases, Allegheny Ludlum Steel Corp., declared "American industrial might must prepare itself to compete on a world market as it did several years ago on a national market when there were howls of unfair competition from Southern states."

To achieve more overseas sales, he said, American business must:

(1) Have improved depreciation laws.

(2) Get tax consideration on research expenditures.

(3) Recognize the cost factors in various make-work rules and get cooperation of labor to eliminate the practices.

(4) Accept responsibility for political activity to create a climate conducive to meeting foreign competition.

(5) Do some good old fashioned purchasing cost reduction by buying the best products at the best value for his company.

## Electronics Firm Files Anti-Trust Damage Suit Asking for 1.5-Million

Philadelphia—A \$1.5-million damage suit has been filed in U.S. District Court here by the Robinson Electronics Supervisory Co., Inc. against the Grinnel Corp. and four other Philadelphia firms, which Grinnel allegedly "owns or controls."

The suit charges the Grinnel organization with attempting to force Robinson Electronics out of business through monopolistic practices, and charges further that all five firms are violating the Sherman and Clayton Anti-trust Acts.

Both plaintiff and defendants install and operate burglar and fire alarm systems. The damage suit claims that Grinnel "controls the major share of the market and is able to maintain its customers and determine prices and policies without regard to such limited competition as exists."

The four other defendants are The American District Telegraph Co., The Automatic Fire Alarm Co., The Philadelphia Local Telegraph Co., and Holmes Electric Protective Co. of Philadelphia.

## Canadian Oilman Predicts Rise in Exports of Crude

Hamilton, Ont.—A top Canadian oil executive predicts his country's oil exports will more than double within ten years.

Vernon Taylor, a director of Imperial Oil Co., told a local meeting of the Canadian Manufacturers' Assn. that the U.S. would provide a major outlet for Canadian oil in "such areas as the Great Lakes, Minnesota, and Puget Sound." Canada currently is exporting some 50,000 barrels of crude a day.

Taylor predicted that Canadian oil production would reach a level of 1¼-million barrels a day by 1970—or two and a half times 1959 production.



# Fewer Item Varieties Lowers Indirect Costs; Simplifies Inventory Control and Purchasing

(Continued from page 1)  
while indirect costs have been mounting and ignored."

He said that while it is difficult to measure and put a dollar value on indirect costs, it is certain that tremendous savings could be achieved in this area—through such techniques as variation reduction.

Emphasis on reducing item varieties is a new activity at Burroughs, and Abele's eight-member staff is devoting 50% of its time to developing a catalogue of priority parts.

To make his point about achieving savings through variation reduction, he quoted Perkins McGuire, Asst. Secretary of Defense for Supply and Logistics:

"More than 500,000 new items enter the system every year, and an equal number are eliminated. If you consider that we save about \$1-million a year in management expenses for every 1,000 items eliminated from our supply system, you may get an idea of the attendant savings in such a standardization effort."

## Private Industry Can Profit

Private industry probably cannot save \$1,000 an item per year through reduction of varieties, but a company the size of Burroughs, with a vigorous program, may be able to save a total of \$1-million annually, Abele said.

He listed just a few indirect costs generated by the entry of new items, such as engineering analysis, prototype studies, drawings, entering into engineering records, tooling and processing, keeping production records, devising and printing processing cards and assembly instructions, time and motion studies, purchasing information, inspection gages, and service cataloging.

"Just to maintain a part in the system means ordering it several times a year, setting up time if it is manufactured, and vendor analysis records if it is purchased, receiving inspection, engineering changes, and other things," the standards engineer explained. "All this, plus inventory costs, may amount to as much as 25% of the item's cost."

Abele pointed to riveted spring studs as an example: The tiniest variation in dimension requires a new part number, and Burroughs currently has numerous spring studs listed in its standard parts catalogue. Sometimes, he explained, two different persons put the same element, with different model numbers and names, into

the system when they are purchased from different vendors, thus doubling costs.

Also, two barely different bolts often are chosen arbitrarily to do similar jobs when one would serve both. Controlling the engineer—making him realize he engineers cost into the product—is only half the battle, he stressed. "The purchasing agent has two vital jobs in the project," he said. These are:

- Policing the system—seeing to it that new items are not introduced when existing ones are adequate.

- Feeding information to engineering about vendors' new products and developments for the sake of progress and improvement. This requires the P.A. to know the product and the technical aspects of improving it, plus good value analysis methods and vendor evaluation techniques.

## BURROUGHS' ATTACK ON ITEM VARIETIES

First, limiting planned variety by putting limitations in design. This is done by classification:

- (A) Survey the existing parts in the system.
- (B) Segregate parts into specific classes or codes.
- (C) Catalogue the parts and insist the engineers use the catalogue whenever possible.

Second, reducing excessive existing varieties by simplification and unification. To simplify:

- (A) Weed out excess varieties without changing what's left.
- (B) Merge remaining varieties by making them interchangeable where possible.
- (C) Remember that when changes are required, the indirect cost to remove the part is less than the cost to retain it.

To unify or standardize:

- (A) Recognize national, industrial, or government standards.
- (B) Give preference to standard parts. This provides further limitations in design.

Gregory Grant says —

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